

CA JOURNAL

DOCUMENTS

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OFFICE OF
AVIATION INFORMATION

Airports Keystone To Aviation Boom, Asserts Mr. Burden

The United States has the makings of "a real civil flying boom," which can be "a bubble that bursts, or a sound and lasting growth, depending on the development of better aircraft and a better airport system," Assistant Secretary of Commerce William A. M. Burden told the American Road Builders Association recently.

Pointing out that "we have about 3,000 airports for the more than 16,000 communities of the nation," Mr. Burden said "no matter how fine a plane the aircraft industry builds, it will be of little value unless our present airport system is improved drastically."

Mr. Burden expressed the hope that the House and Senate soon would reach a compromise on the federal-aid airport bills, warning that delays will mean that work will not begin until the 1947 construction season.

Aviation Interest Increasing—"There is a wide and growing public interest in aviation," Mr. Burden said, "which, if given the opportunity, can be translated into the purchase of aircraft until 400,000 planes are in use by 1955." He emphasized, however, that potential buyers must be offered a product with real utility, which can come from two sources—the aircraft industry, and the private and public interests concerned with building airports.

Many Seeking Help—Regarding the part played by the airport building plan and the possibilities for expansion of private flying Mr. Burden said: "Our airport engineers are swamped with requests for advice on site selection, airport design, and the like. Many veterans are asking for guidance in establishing small fields."

"Let me make plain that the CAA plan for a national system of 6,300 airports in no way is intended to set a maximum. Beyond this there is plenty of room for private enterprise or local government to develop fields at locations where there is not sufficient national interest to justify Federal expenditure."

"As private flying expands, we will need many thousands of additional landing areas, which will constitute the secondary or dirt-road system needed

(See *Aviation Boom*, page 16)

Pioneer CAA Plane Now a Memory

"Old NC 18," the most faithful friend CAA pilots in Alaska ever had, has flown her last flight. She was old, and she was tired; she had lugged the strangest collection of articles ever stuffed into a respectable airplane's belly, and the cold of Alaska was in her bones.

She is gone now, but her ghost still drones through Alaskan skies where she made a record not soon forgettable. And she poses a question: "When do all-metal airplanes wear out?"

"NC 18," a Boeing 247-D, had a long and eventful life. She was born in the early 1930's, and she flew many, steady hours for United Airlines back and forth across the continent. The next group of pilots to push her faithful nose through all types of weather wore the uniform of the Pennsylvania Air Lines, later Pennsylvania Central Airlines. NC 18 was middle-aged by then, but she was just getting warmed up.

Pennsylvania Air Lines graduated to Douglas DC-3s and NC 18 was sold to the Celanese Corporation. She still churned on, piling hours into the dog-eared log book. Then, in 1939, she became the property of the CAA and headed for Alaska.

She became the working home of Pilot Jim Hurst and Co-pilot Lawrence "Fuzz" Rogers. Jim Hurst had been a CAA Flight Inspector at College Park, Md. He was fed up with "paper work" and yearned for the frontier and more flying. Rogers was a California mechanic who had come up from wool sorting, truck driving, and automobile mechanic. Alaska is his first base of employment with the CAA.

With the coming of new CAA equipment to Alaska, three war surplus DC-3's, NC 18 finally reached the end of the sky-road. She was flown to Indianapolis where she will be broken up to provide parts for a sister Boeing, which is used for experimental work there. Thus, though NC 18 has flown her last flight, parts of her will continue to work towards better flying conditions for the airmen of the future.

CAA Asks Funds To Keep Abreast Aviation Growth

In an attempt to keep abreast of rapidly expanding civil aviation activities, a request has been placed before Congress for an appropriation of \$69,508,000 to the Civil Aeronautics Administration for activities in the fiscal year beginning July 1, 1946. The amount called for in the President's 1947 budget compares with actual appropriations of \$51,090,000 made to CAA for the current fiscal year.

Largest Single Item—Biggest increases occur in the funds proposed for construction and operation of air navigation facilities. Replacement of obsolete facilities with very high frequency ranges, planned for 1941 and postponed by war priorities, now is essential to safety and efficiency. For 1947 this will mean additional expense of some 7 million dollars.

Overseas operations of American flag airlines will be in full swing by 1947, and will require \$2,890,700 in new facilities, plus some \$604,000 for Alaska. The program will round out a network of powerful CAA communications stations at New York, Los Angeles, San Francisco, Everett, Wash., in the Caribbean area, and at Wake, Manila, Midway and Guam.

In addition, these routes will be equipped with radio ranges, providing navigation facilities equivalent to those on domestic routes.

Instrument Systems a Must—Instrument landing systems, which could be installed during the war only for Army use, must now be placed at all major airports to prevent delays, or even disasters caused by stacking up in bad weather of the increasing volume of airline schedules. This item comes to about 1.6 millions.

The total of \$2,257,000 for improvements at air traffic control centers and towers covers equipment for the time-saving "approach control" system and tryout of an automatic communications and posting system on the Washington-New York airway.

The CAA will finance operation of 90 airport traffic control towers previously paid out of military funds, and 20 new towers. Additional cost of this and other traffic control activities is \$3,537,352.

Adaptation of military radar and other important radio development projects will account for \$200,000

(See *Funds for Aviation*, page 17)

Booklet to Assist Cities Planning Airport Building in Preparation

"Airport Buildings", a new 36-page booklet designed to help small and medium-sized cities planning new airports or remodeling present facilities, has been published by the Civil Aeronautics Administration, T. P. Wright, Administrator, has announced.

One of Series—The booklet is one of a series on airports issued or planned by the CAA as aids to individuals, cities and the aviation industry. It will be sold through the Superintendent of Documents, Washington 25, D. C., for 20 cents a copy.

"In the past there has been too much hasty or short-sighted planning," the booklet points out. "Airport buildings have been erected as the need has arisen, without relation to each other, to the landing area, to architectural harmony, or to the needs of future expansion."

Practical men with experience in every phase of airport problems supplied the information for the booklet—airport managers, city officials, airlines personnel, architects, engineers, and officials of the Post Office Department and Customs and Immigration Service. The CAA correlated the suggestions and experience of these men into a working guide.

Ground Covered—The booklet is divided into two parts; one devoted to terminal airports used by regularly-scheduled airliners, and the other to personal-flying airports.

Part I has chapters on Airport Plan, Apron, Administrative Area, Terminal Group, Concourse, Terminal Building, Offices, Mail and Express, Customs and Immigration, and Maintenance Area.

Part II offers an airport plan for the personal-flying airport, Administration Building, Maintenance Hangars, and Personal Plane Storage.

In addition to the two main parts of the booklet, there are chapters on basic airport considerations and on general architectural characteristics.

The importance of making an airport pay its own way, not only at present but in the years to come, was a basic tenet in preparing the booklet. The first chapter, for example, says:

"More and more airport managers are becoming aware that the airports which pay their own way or make a profit are those with good revenue-producing activities other than the scheduled airlines. Provision must be made to meet applications for additional office space, airplane sales display, stores, garages, hotel, restaurants, amusements, concessions, etc.

Rental Values Discussed—"The space which has the highest rental value for most of these activities is the 'administrative area.' Too often, however, there

Posey CAA Liaison Officer With Caribbean Defense Unit

Carl A. Posey has been assigned by the Civil Aeronautics Administration as its Liaison Officer with the Caribbean Defense Command and consultant to the governments of Central and South America on airport construction problems.

Mr. Posey will be stationed at Balboa, Canal Zone, as part of CAA's expanding program in the foreign field. He will share U. S. experience in airport construction and operation with countries in which both U. S. and native air transportation interests are growing rapidly.

He recently completed a year's mission for the CAA in Costa Rica and Venezuela, where he advised on airport problems. Before that assignment, he served as CAA District Airport Engineer at St. Paul for four years. He worked with Pan American Airways and the Army on airport construction before joining the CAA.

Mr. Posey is a pilot as well as an engineer, and speaks Spanish. He was born in Cleveland, Tex., and educated in Lawton, Okla.

is little to offer the prospective tenant but a location in some remote part of the airport. The prospective tenant sometimes is forced to build on privately-owned land outside the limits of the airport.

"The airport, on which the very existence of the private venture depends, thus is deprived of this source of revenue. Frequently, privately-owned structures built adjacent to the entrance to the airport are 'mushroom growths' which, being without any supervision whatever, detract from the appearance of the airport itself.

"Some controversy may continue concerning the desirability of these 'revenue producers' at the airport, but there is little doubt in the minds of those whose job is to make the airport pay. Such objection as does exist is fading rapidly.

"Even where this objection persists, it is well for the planner to leave a generous space in the administrative area for this purpose. It is likely that there will be a reversal of opinion, in which event the available ground will be welcomed."

Bruce Uthus Resigns Aviation Training Post

Bruce Uthus, Assistant Administrator for Aviation Training, has resigned his Civil Aeronautics Administration post to become Director of Training Development for TWA Airline, with headquarters in Kansas City. No successor has been named.

Mr. Uthus has been in government service for 12 years, the last four of them with CAA. He was brought to CAA to initiate and develop aviation education and training programs.

Mr. Uthus' work in aviation education was recognized by the awarding of the Frank Brewer trophy and an honorary doctorate from the University of Oklahoma City. He is also a member of the University of Illinois Advisory Board on Aeronautics.

In addition to directing the in-service training programs for CAA employees, Mr. Uthus was in charge of CAA's foreign national training activities under which selected students from other countries were brought to this country for training as pilots, and airway and mechanic technicians.

During the war Mr. Uthus handled CAA's manpower problems, involving 11,000 employees in this country and abroad.

A native of Chicago and a graduate engineer from the University of Illinois, Mr. Uthus was a consulting engineer in the midwest until called to direct a public works program in Wisconsin in 1934.

Fund Sought to Establish Maj. Bong Memorial Fund

Plans to honor the memory of Major Richard Bong, American ace who got his start in the Civilian Pilot Training Program of the Civil Aeronautics Administration, have been announced by The Richard Ira Bong Memorial Foundation.

The Foundation hopes to raise funds to establish 50 aeronautical engineering scholarships annually for the nation's best high-school graduates, and to erect an educational and recreational building in Poplar, Wis., where Bong is buried. The building would house a museum of allied and enemy aircraft and other equipment from World War II.

Planning of Airports Increasing Rapidly, Mr. Wright Reports

Airport planning in local communities has shown a sharp increase since the end of the war according to figures compiled by the Airport Planning Division of the Civil Aeronautics Administration, T. P. Wright, Administrator, announces.

Many hundreds of towns have requested information regarding airport development. A great number have asked for details concerning Federal aid.

Construction Begun—Construction actually is under way at other locations. Among these are Harrison, Ark.; Dubuque, Guthrie Center, and Perry, Iowa; Wichita, Kans.; Worcester, Mass.; Pellston, Mich.; Bartlesville, and Okemah, Okla.; Dimmit, Floydada, Graham, Lampasas, Lufkin, Mason, and New Boston, Tex.; and Parkersburg, W. Va.

Several hundred towns have requested CAA airport engineers to inspect airport sites. A great many have submitted master plans covering several years of development. Others are now at work improving the existing airport, and several have purchased the necessary land, or hold options on it. U. S. cities have appropriated or have available a total of more than \$150,000,000 for airport development.

Take Action for Funds—Among those reported to have taken action to raise the funds are Fort Smith, Ark.; Pasadena and Red Bluff, Calif.; New Haven, Conn.; Titusville-Cocoa, Fla.; Frankfort and South Bend, Ind.; Des Moines, Dubuque, and Guthrie Center, Iowa; Hazard, Ky.; Worcester, Mass.; Detroit and Pellston, Mich.; Jefferson City and St. Louis, Mo.; Butte, Fairfield, Libby, Livingston, and Whitehall, Mont.; Broken Bow, Nebr.; Ithaca, N. Y.; Shelby, N. C.; Ashland, Cleveland, Marion, and Steubenville, Ohio; Anadarko, Duncan, Guthrie, Lawton, Magnum, Newkirk, Okemah, and Oklahoma City, Okla.; Albany, Oreg.; Lebanon, Pa.; Providence, R. I.; Alphone, Bonham, Bryan, Canadian, Dallas, Denison, Dimmit, Eastland, Fredericksburg, Mason, Matador, Menard, Monohans, Plainview, Seymour, Sinton, Stamford and Taylor, Tex.; Anacortes, Dayton, Paterson-Brewster, Tacoma, and Tekoa, Wash.

CAA Substitutes Navy SNJ-3's In Place of Noisier BT-13's

More suitable and modern airplanes for use by Civil Aeronautics Administration inspectors were assured when T. P. Wright, Administrator for Civil Aeronautics, announced that surplus Navy SNJ-3's (Army designation AT-6) will be used instead of BT-13's as planned last fall.

The CAA originally selected 108 surplus basic training planes, BT-13's, which were available in large numbers. It has developed, however, after complete disassembly of sample planes, that 300 man-hours of work are required to make these planes airworthy under CAA standards. This would make for great cost, and so the Navy's advanced trainers have been chosen instead.

Criticism of the BT-13 plane because of its noise, will be answered by the considerably quieter SNJ-3 which has a hydromatic, constant-speed propeller. In accordance with its campaign against noisy airplanes, the CAA disliked using the noisy BT-13's, but it had no choice but to accept what surplus planes were available at the time. The change will reduce the noise evil.

The planes will be used principally by CAA aeronautical and air carrier inspectors who cover large areas on regular itineraries. They carry two persons, and have ample capacity for the supplies and equipment which inspectors must carry in their travels.

Rules for Air Traffic Are Clearly Explained In 'Student Pilot Guide'

Responsibilities of student pilots in connection with safety are emphasized in the "Student Pilot Guide" issued by CAA.

Musts for the Pilot—"The pilot must operate his aircraft," the Guide states, "in a safe and careful manner, so as not to endanger life and property, and he must observe the limitations specified upon the operations record carried in his aircraft."

Copies of the Guide are obtainable from the Office of Aviation Information, Civil Aeronautics Administration, by personal application or mail request.

Regulations Outlined—The section devoted to Air Traffic Rules outlines regulations which must be observed and which embody information necessary to pass the written test for student pilots. Text of that section follows:

Right-of-way—Aircraft in flight have precedence in the following order: (1) balloons, (2) gliders, (3) airships, (4) airplanes towing gliders, (5) airplanes and rotorplanes. Any aircraft in distress has precedence over all other aircraft.

For aircraft of similar type the following right-of-way rules apply:

Proximity—The minimum proximity of aircraft in flight is 500 feet (except by prearrangement of the pilots).

Converging—When an aircraft is crossing your course at approximately the same altitude, if the aircraft is on your right it has the right-of-way; if on your left you have the right-of-way.

Overtaking—When you are overtaking another aircraft you must alter your course so as to pass to the right.

Approaching Head-On—When you are approaching another aircraft head-on, you must alter your course to the right.

Landing—An aircraft making a landing has right-of-way over other aircraft in flight or on the surface.

Minimum altitudes—For flight over congested areas or over open-air assemblies the minimum altitude must be sufficient to glide to a landing outside such areas, but never less than 1,000 feet. Elsewhere the minimum is 500 feet, except that flight at lower altitude is permitted where there is no hazard to persons or property on the ground.

Weather minimums—The minimum proximity to clouds and the minimum visibility prescribed by the Civil Air Regulations may appear somewhat confusing to the student pilot, since there are seven different categories, classified as to flight altitudes and flight areas. However, a pilot who observes the minimums given below will be following accepted safety practices, and will be in full compliance with all the minimums established by the regulations:

Minimum proximity to clouds—2,000 feet horizontally; 500 feet vertically.

Minimum visibility—3 miles. (In certain practice areas take-offs and landing may be safely made when the visibility is as low as 1 mile.)

Operations at airports—When flying in the immediate vicinity of an airport, aircraft must conform to the flow of traffic. This usually consists of a left-hand circuit, although at certain airports a different procedure has been established. If a control tower is in operation, the pilot is required to observe its instructions.

Lights—During the hours of darkness, aircraft in motion must display position lights. Aircraft parked in dangerous proximity to areas available to night flight operations must be illuminated or lighted, unless the parking area is marked with obstruction lights. Seaplanes moored in navigational lanes must display a light.

Aerobatic flight—Aerobatic flight is permitted any-

CAA and CAB Releases

Copies of CAA releases may be obtained from the CAA Office of Aviation Information. CAB releases are obtainable from the Public Information Section of the Board. Both offices are located in the Department of Commerce Building, Washington 25, D. C.

Administration

"CAA Issues List of Plane and Glider Certificate Holders"

"CAA Inspectors Named to Issue Border Permits for Private Aircraft"

"\$3,900,000 Recommended for Washington Airport Facilities"

"CAA Prepares Big Surplus Airport Program"

"CAA Gets 231 Surplus Army and Navy Airplanes"

"Civil Aviation In 1945"

"Year-end Report by the Civil Aeronautics Administration Shows Rapid Switch-over to Peacetime Flying as Industry Prepares for Boom"

"Canada to Present Hero Medals to Three CAA Men"

"CAA Streamlines Inspection of Aircraft to Handle Mass Output"

"Old NC14, Famous Alaskan CAA Plane, Ends Its Days"

"H. L. Child Named to Civil Aeronautics Post"

"Easton Returns to CAA; Two Others Appointed"

"CAA Man to Advise American Republics on Airport Construction"

"Chinese Learning Airport Operation from CAA"

"CAA Inspectors to Use Navy Surplus Planes"

"Assistant Secretary of Commerce Sees Civil Flying Boom Dependent on Better Aircraft and Improved Airport System"

"Uthus Resigns as Head of CAA Training"

"Airport Building and Planning Shows Increase"

"CAA Presents 10-Year-Old Roadable 'Giro to Museum'"

Board

"CAB Defers Further Consideration Regarding IATA Resolution"

"CAB Considers Agreement By 13 Air Carriers Concerning Wages of Pilots of Four-engine Aircraft"

"CAB Names Baltimore Co-terminal on North Atlantic Air Routes"

"CAB Issues Part 03—Airplane Airworthiness"

A New Twin-Engine Trainer

A new twin-engined two-seat trainer, the Desford, has been announced by Reid and Sigrist, British manufacturers. First appearing early in 1939, and known as the Snargasher, its development was held up during the war. Now another prototype has been built and for some months has been undergoing test flights.

where except over congested areas of population or over open-air assemblies, or where it may endanger air traffic. When an airplane is flown aerobatically, with one or more passengers, all occupants must be equipped with parachutes packed within the preceding 60 days.

3 Chinese Students Finish First Phase of Airport Studies

Three employees of the China National Airways Corporation selected by the Chinese government to study American airport operations under an arrangement with the International Training Administration have completed three months of intensive training at the Washington National Airport.

The three, Ssu-Ho Teng, Szu-Hou Shieh and Dah-Cheng Yung, participated in a carefully planned program in each activity of Civil Aeronautics Administration airport operations under the supervision of David A. Robb, Chief of the Business Management Branch of the National Airport.

All Phases Studied—Their study course included internship in the actual operations of the airport, including air traffic control, communication, management, car handling, fueling, weather observation and associated activities.

They will follow their Washington experience with a short period at LaGuardia Airport, New York, and then will go to Boston, Massachusetts, for study of winter-operations, snow-removal, and other difficult problems peculiar to severe weather activities.

From Boston, the Chinese students are expected to attend Texas A & M for a short period of mechanical instruction, and from there to the Hawthorne Flying School, at Columbia, S. C., for the routine of flight instruction operations. There is a possibility that the Goodyear Company, in Akron, Ohio, also will play host for discussions of the possibility of lighter-than-air equipment for cargo traffic to the Orient.

Chosen for Ability—All three possess both scholastic and practical training. Ssu-Ho Teng majored in economics in college, has managed hotels, worked in banks, and for the China National Airways Corporation; Szu-Hou Shieh, also a college graduate, was a fighter pilot in the Chinese Air Force and a pilot for the China National Airways Corporation; Dah-Cheng Yung has been a radioman and co-pilot for the China National Airways Corporation, before becoming manager of different stations on the China National Airways Corporation network.

At the completion of their training next June, the three men will return to China to apply the most desirable American methods to the airlines of their own country.

Approximately 12 other Chinese are in the United States studying airline operation and aviation manufacturing methods.

Revised Air Navigation Bulletin Now on Sale

The second edition of Civil Aeronautics Bulletin No. 24, "Practical Air Navigation," is now available. Actually in its fifth edition, the first three having been issued as Special Publication No. 197 of the U. S. Coast and Geodetic Survey, the text has been completely revised by its original author, Thoburn C. Lyon, and several new chapters have been added.

The 351-page bulletin contains pertinent information on Chart Projections for Air Navigation, Instruments, Chart Reading, Dead Reckoning, Air Navigation Computers, Radio and Celestial Navigation, etc. It may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for one dollar.

Airports Are the Keystone to Aviation Boom

(Continued from first page)

to fill out our pattern of ground facilities for civil aviation.

Local Problem—"The financial responsibility for such landing areas will be a local one—state, county, and municipal—just as is the financial responsibility for our subsidiary roads system and our streets. If, as is likely, 20,000 such landing areas are ultimately required to serve the 15,000 incorporated communities of the United States, the cost at the very modest average figure of \$25,000 per unit would be \$500 million.

"With this in mind, I would urge everybody interested in airports not to remain idle while awaiting Federal legislation. Investigate and plan your share in the nation's airport program. The need is plain. Now, action is the order of the day. It is further important to remember that Congress has a very heavy legislative burden before it in the present session. Prompt action on the very important airport bill is by no means assured unless those who feel that such legislation is of national importance make it clear that they believe rapid action to be imperative from the standpoint of our aviation progress and our economy as a whole."

Discussing airport building, Mr. Burden said:

"We improved our airport situation somewhat during the war years, but not in the direction most needed for peacetime aviation. Necessarily we built large fields for military planes. More than 500 have been completed in the CAA defense landing area program, at a total cost of \$400,000,000. As a result, we have today more than 800 of the largest airports—what the CAA calls class 4 and 5—in sharp contrast to no large airports of those classes in 1939.

Need Small Ports—"On the other hand, there has been a decline in the number of small airports, the so-called class 1 and 2 fields. From 2,117 in 1939, the total dropped to 1,791 in 1944. Since VJ-Day there has been a growth in the number of small fields, but the total has climbed only a little beyond the 1939 level, despite tremendous increases in the number of airport users.

"These deficiencies in our airport system harm not only the towns without airports; they hurt the towns which do have fields. If you were considering buying an airplane, you would of course want to know what kind of a base for operations there was in your home town. But more than that, you would weigh the number of places to which you could fly your plane. You would ask yourself: 'Is there a landing field near Smithville, where my folks live? Would I be able to run up to Bear Lake on summer weekends? Are there airports in most of the towns where I do business?'

"If the answer to these questions is 'No' the chances are you will drop the idea of buying a plane, and the airport in your town will lose a paying customer simply because there are no airports in other towns. If you buy a plane without considering these important factors, it is very likely that you will give it up in a year or two when you realize how little use you are getting out of it. This is exactly what more than 60 percent of plane purchasers did in the years 1931 to 1939.

"That is why every town has a vital interest in the development of airports everywhere, and that is why we call our proposal for airport construction the 'National Airport Plan.' It has been framed with the idea of achieving a uniformly adequate distribution of airports for town and country—for thickly populated industrial regions, and states with large areas between population centers.

Plan Goes to Congress—"We submitted this plan to Congress in November 1944, and no doubt changes which since have taken place in the airport picture will require some revision of our figures, but at that time we estimated the need as follows:

"New airports, 3,050; existing airports needing im-

provement, 1,625; total cost, about 1 billion dollars plus another quarter billion for land and buildings. Tentative division of the billion dollars would be 525 million for site preparation (mostly grading and drainage), 395 million for paving, 55 million for lighting, 11 million for radio, and the balance miscellaneous.

"Bills that would permit us to put into effect a long-range federal-aid program of this type have been passed by both the House and Senate. A conference committee has been attempting to resolve the differences in the two bills and draft a measure acceptable to both houses. You may be interested in a brief review of the principal differences between the two bills.

"The two versions of the bill are in general agreement as to the Federal share of project costs, both providing that the United States share shall not exceed 50 percent of the 'allowable project costs.' However, they differ materially as to the exception made to this rule. The House exception is merely that the Federal share may be as much as 75 percent in the case of projects in Alaska. The Senate exception would increase the Federal share in any state containing public lands and Indian lands, exceeding five percent of the total area of the state. The increase would be by a percentage of the project costs 'equal to one-half the percentage that the area of all such lands in such state is to its total area.'

Provisions of S. 2—"S. 2, the Senate-approved bill, requires that all grants for projects in a state be made to the state airport agency unless the state does not have an adequate airport agency or has not appropriated state funds for airport purposes. In such cases, grants may be made directly to the public agencies sponsoring the projects. On the other hand, the bill as passed by the House does not require the channeling of funds through state agencies but instead authorizes direct grants to any project sponsors which are not prohibited by state law from receiving such grants.

"In its reports on these measures, the CAA, while pointing out that the program could be administered in either way, has taken a middle ground between these two extreme positions, recommending type of program which would involve channeling through the states all except the largest type airports (Class 4 and Class 5).

"As passed by the Senate, S. 2 authorizes a total appropriation of \$375,000,000 for projects in the states, over five years, while the House bill increases this amount to \$650,000,000 over ten years.

"The two versions of the bill differ materially with respect to the length of the proposed airport program. The Senate version authorizes annual appropriations for only five fiscal years, but provides that all funds so appropriated are to remain available until expended. The House version, on the other hand, authorizes annual appropriations for ten fiscal years at a rate of not to exceed \$100,000,000 in any one year (permitting appropriation of the entire \$650,000,000 authorized in seven years). All funds appropriated under the House bill shall remain available only until June 30, 1956, unless sooner expended.

"Another extremely important difference between the two measures is that while the Senate version authorizes the inclusion of land acquisition costs among the project costs to be shared by the government, the House version expressly forbids such federal aid.

"While the House version contains a section authorizing the condemnation of lands for project sponsors at their request where this would avoid undue expense or delay, the Senate lacks any such provision.

"Another major difference between the bills passed by the Senate and the House is that the Senate version confines the program to projects in the several states. The House version, in addition to the

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Henry A. Wallace
Secretary of Commerce

Civil Aeronautics Administration
T. P. Wright, Administrator

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PREPARED BY
CAVIATION
INFORMATION



Q. What is the lowest temperature recorded in high altitude flights? W.V.

A—The Air Technical Service Command reports a B-29 Superfortress flying at a height of more than 40,000 feet registered a temperature of 86 degrees below zero.

Q—Have any aircraft plants been declared available for allocation on the German reparation account by the Allied Control Council? D.W.

A—The January 12 issue of the Department of Commerce Foreign Commerce Weekly listed the Norddeutsche Dornierwerke No. 2 aircraft parts factory at Luebeck.

Q—What kind of salary could I expect to make working for an airline? N.A.

A—That depends on the type of job; the range is wide. A chart in the CAA publication, "Civil Aviation and the National Economy," shows that in December, 1944, average monthly pay of stewards was \$139.26, while first pilots averaged \$659.70.

Q—How big does the CAA expect the post-war airliners to be? H.E.

A—In 1955, according to "Civil Aviation and the National Economy," the largest number of airliners will be in the 16 to 22 seat class, but there will be about 30 planes of 200-seat capacity flying international routes.

\$650,000,000 authorized for such projects, expressly authorizes annual appropriations aggregating not more than \$50,000,000 for projects in the territories and possessions of the United States.

Provisions of House Bill—"The House version of the bill contains a provision not found in the Senate version, directing the War and Navy Departments to 'consider the views and recommendations of the Administrator, to the end that military and naval airports and airport facilities may be made available for civilian use to such extent as is feasible.'

"If everything goes smoothly, it may be possible to get some construction under way this summer, but delays will mean that work will not begin until the 1947 construction season.

"Meanwhile, the aircraft factories are going full speed on orders for 40,000 civil planes. Thousands of men are coming out of the armed services anxious to take up civil flying either as a pastime or as a business. During 1945, the CAA issued more than 50,000 commercial pilot certificates to men in the armed services. In addition, we certificated 70,000 student pilots, which compares with 30,000 in 1939."

CIVIL AERONAUTICS JOURNAL

Col. Duckworth Named CAB Safety Unit Head

Colonel Joseph B. Duckworth has been appointed Director of the Civil Aeronautics Board's Safety Bureau. He will fill the position left vacant by the recent resignation of Jesse W. Lankford, who has asked to be released from his wartime appointment as director, in which capacity he has served since December 1942. Mr. Lankford will remain with the Board in charge of accident analysis work.

After ten years as a first pilot with Eastern Air Lines, Colonel Duckworth went on active duty as a major with the Army Air Forces in November 1940. During his five years with the Army he served successively as operations and flying safety officer, director of training, post executive officer, post commander and wing commander.

In all this work he was concerned directly with safety of flying, particularly with the development of a new and improved system of instrument training for the Army Air Forces, which he and men working under his direct supervision evolved, tested, and wrote.

He received the Air Medal for being the first pilot to fly through the center of a tropical hurricane.

New Types Approved by CAA; New Models Added to Old

The following new type aircraft, engines, propellers and appliances have been approved by the CAA. In addition, new models have been added to previously type certificated engines, propellers and appliances. Approval numbers and dates of approval appear in parenthesis.

New Types

Aircraft—Lockheed, model 49-51, 57 place closed land monoplane. Engines, 4 Wright Cyclones 739C18BA-1 or 739C18BA-2, with 16:7 reduction gear ratio. (Type Certificate No. 763, 12-29-45)

Engines—Aircooled Motors, Franklin model 6A8-215-B7F; 6 cyl. opposed aircooled by integral fan. Rated 215 hp at 2500 rpm for all operations. Uses 80 octane fuel. Weight (dry) 416 lbs. Has provisions for starter and belt-driven generator. (Type Certificate No. 242, 12-18-45)

Propellers—Koppers, model 220 propeller with 0-88 blades; steel hub with wood blades; 88 in. to 68 in. diameter; automatic pitch; 190 hp, 2550 rpm. (Type Certificate No. 833, 12-12-45)

Appliances—Firestone, Type III (low pressure) wheels, models DFA-178 and DFA-180; 6.00-6. Approved static load per wheel 1050 lbs. and 1300 lbs. respectively. (Type Certificate No. 163, 11-14-45)

New Models

Engines—Wright Double Row Cyclone, models 745C18BA1 and 745C18BA2; 18 cyl. twin row aircooled with 16:7 propeller reduction gearing. Ratings: (Low blower) Maximum, except take-off, 2000 hp at 2400 rpm from sea level to 5100 ft. Take-off, 2200 hp at 2800 rpm; (High blower) Maximum, except take-off, 1800 hp at 2400 rpm from 9000 ft. to 15500 ft. Take-off, 1900 hp at 2600 rpm from 10,000 ft. to 14,500 ft. Uses 100 octane fuel. Weight (dry) 2700 lbs. (Type Certificate No. 218, 12-19-45)

Pratt & Whitney, Twin Wasp model 25C13-G; 14 cyl. twin row aircooled with 2:1 propeller reduction gearing. Ratings: Maximum, except take-off, 1200 hp at 2550 rpm from sea level to 5200 ft.; Take-off, 1450 hp at 2700 rpm (low blower), 1100 hp at 2550 rpm from 7000 ft. to 15,000 ft. (high blower). Uses 100 octane fuel. Weight (dry) 1595 lbs. (Type Certificate No. 230, 12-17-45)

Aircooled Motors, Franklin model 2A4-45-B2; 2 cyl. opposed aircooled. Rated 45 hp at 2600 rpm at sea level for all operations. Uses 80 octane fuel. Weight (dry) 116 lbs. No provisions for starter and generator. (Type Certificate No. 240, 12-7-45)

Propellers—Hamilton Standard, model 22D propeller with 6529A-36 and 6530A-36 blades; steel hub with aluminum alloy blades; 8 ft. 7 in. diameter; hydraulically controllable feathering; 500 hp, 2300 rpm. (Type Certificate No. 736, 12-6-45)

Hamilton Standard, model 33D propeller with 6547A-12, 6548A-12, 6569A-12 and 6570A-12 blades; steel hub with aluminum alloy blades; 10 ft. 6 in. diameter; hydraulically controllable feathering; 1650 hp, 1435 rpm. (Type Certificate No. 749, 12-7-45)

Hamilton Standard, model 33D propeller with 6571A-0 and

(See Type Approvals, page 23)

Baltimore Transatlantic Airport By New Aeronautics Board Ruling

Baltimore has been named a co-terminal point on the North Atlantic route by a recent decision of the Civil Aeronautics Board. Previously the Board had omitted the port city.

Basis of Previous Decision—Referring to the previous report, the Board in its current opinion announced:

"We considered Baltimore as a potential point to be served on trans-Atlantic routes but decided to omit a stop at that point due to its proximity to Washington. In that case 7-year term certificates were issued authorizing service across the North Atlantic with Boston, New York, Philadelphia, Washington, Chicago and Detroit designated as co-terminals for trans-Atlantic traffic."

Upon application of Baltimore and the Maryland State Aviation Commission that Baltimore be designated as a co-terminal on the North Atlantic routes, the Board held a hearing, and issued its decision after examiners report, brief and oral argument had been waived.

New Ruling Explained—Reasons given by the Board for its present action include Baltimore's prominence as a seaport and its importance as a national reshipping center. The Opinion states:

"The importance of Baltimore as an industrial center, its rank as the second greatest seaport in the United States, its accessibility to a heavily populated, highly industrialized hinterland, and its competitive position among the other large industrial cities and as a port city are all stressed as justifying the request made in this application."

"In view of the demonstrated importance of Baltimore as a port for international trade and the possibility which the future holds for the development of international transportation of passengers and cargo by air, we find that the public convenience and necessity require amendment of the certificates awarded to Pan American, American Overseas, and Transcontinental and Western Air to permit service

to Baltimore on the trans-Atlantic routes of those carriers subject to the same continuance of service as that provided in the authorizations of the other co-terminals."

In support of the contention that Baltimore needs foreign air service, attention was directed to the prospects for the development of air cargo as a major source of revenue. Baltimore points out that in view of its overseas cargo potential the cost of shipping such cargo to other cities now designated as coterminals on the route has an important bearing on the need for service.

CAB Asked to Approve Pilot Wage Negotiators

The wage issue between the Air Line Pilots Association and 13 airlines reached the Civil Aeronautics Board when it was asked to approve a negotiating committee, selected by the airlines.

The hearing was conducted by Harlee Branch alone due to the absence of the other members of the Board who were attending the Anglo-American aviation conference in Bermuda. He announced a transcript of the proceedings would be sent them for consideration.

Attending the hearing, in addition to the directly interested parties, were representatives of the Department of Labor, Department of Justice and National Mediation Board.

Members of the Committee designated to represent the air carriers in negotiations with the Pilots Association are Ralph Damon, American Airlines, Inc.; J. H. Carmichael, Pennsylvania-Central Airlines Corporation; S. Shannon, Eastern Air Lines, Inc.; J. Herlihy, United Air Lines, Inc.; R. C. Shrader, Braniff Airways, Inc.; and Paul E. Richter, Transcontinental & Western Air, Inc.

The 13 parties to the agreement include Pennsylvania-Central Airlines Corp.; Transcontinental & Western Air, Inc.; Chicago and Southern Air Lines, Inc.; American Overseas Airlines, Inc.; Northeast Airlines, Inc.; Braniff Airways, Inc.; American Airlines, Inc.; Delta Air Lines, Inc.; Eastern Air Lines, Inc.; National Airlines, Inc.; Northwest Airlines, Inc.; United Air Lines, Inc.; Western Air Lines, Inc.

Pilots Get Physicals Abroad

Airline transport pilots based in Europe can now obtain their six-month physical examinations there instead of having to return to the United States, T. P. Wright, Administrator of Civil Aeronautics, announces.

"We have made temporary arrangements for the examinations to be given at Paris, London, and Dublin," Mr. Wright said. "The pilot merely applies for the examination at the flight surgeon's office of the country involved."

"When the medical certificate is issued, the pilot will retain the original as evidence of his fitness, and forward a copy to the Civil Aeronautics Administration in Washington."

This is only a temporary arrangement, the Administrator said, pending designation of special CAA medical examiners at strategic points throughout the world for the convenience of United States airline pilots based abroad.

Domestic Air Carrier Statistics

Operations for December 1945

Prepared from official reports submitted by the air carriers listed, to the Civil Aeronautics Board

Operator and routes	Revenue miles flown	Revenue passengers carried ¹	Revenue passenger miles flown	Express carried (tons)	Express ton-miles flown	Passenger seat-miles flown	Revenue passenger load factor (percent)
All American Aviation, Inc., Pittsburgh-Huntington, Jamestown, Williamsport, Harrisburg, Washington.....Total	95,610	0	0	2.3	330	0	—
American Airlines, Inc.....Total	4,322,257	117,256	73,197,716	927.0	479,162	84,726,046	86.39
Dallas-Los Angeles.....	1,553,690	27,308	26,666,594	119.0	120,158	30,941,365	86.18
New York-Chicago.....	622,224	24,639	10,186,517	255.0	118,753	11,987,708	84.97
Boston-New York.....	278,476	27,902	5,038,083	130.0	21,723	6,070,957	82.99
Cleveland-Nashville.....	85,993	5,882	1,535,422	50.0	8,719	1,756,524	87.41
New York-Ft. Worth.....	1,130,845	30,619	18,543,640	230.0	132,005	21,115,795	87.82
Washington-Chicago.....	147,731	6,242	2,511,556	46.0	17,895	2,842,758	88.35
Chicago-Ft. Worth.....	286,575	9,896	5,138,785	53.0	27,882	5,833,917	88.08
Buffalo-Toronto.....	10,655	1,399	104,515	2.0	145	220,566	47.38
El Paso or Ft. Worth-Mexico City.....	206,068	4,040	3,472,604	42.0	31,880	3,956,456	87.77
Brantiff Airways, Inc.....Total	804,425	32,468	13,567,057	117.0	45,973	15,812,190	85.80
Chicago-Dallas.....	304,114	12,873	6,827,244	49.6	30,035	7,622,727	89.56
Denver-Brownsville; Amarillo-Oklahoma City.....	378,062	18,689	6,169,828	45.4	14,160	7,517,884	82.07
Houston-Nuevo Laredo.....	32,249	3,320	569,985	22.0	1,778	671,579	84.87
Chicago & Southern Air Lines, Inc.....Total	470,480	16,309	7,523,029	81.9	31,883	9,809,796	76.69
Chicago-New Orleans.....	231,899	10,184	3,924,647	45.5	19,282	4,843,758	81.02
Memphis-Houston.....	238,581	10,040	3,598,382	36.4	12,601	4,966,038	72.46
Continental Air Lines, Inc.....Total	394,649	12,104	5,351,775	13.5	5,715	7,764,736	68.92
Denver-El Paso-San Antonio.....	214,440	7,319	2,957,851	8.5	3,452	4,072,225	72.63
Pueblo-Tulsa.....	40,495	2,767	495,880	1.5	357	838,061	59.17
Denver-Kansas City.....	139,714	4,164	1,898,044	3.5	1,906	2,854,450	66.49
Delta Air Corporation.....Total	613,658	24,983	10,224,154	64.0	29,124	12,803,909	79.85
Charleston or Savannah-Ft. Worth.....	427,362	19,406	7,063,514	35.0	12,952	8,899,673	79.71
Atlanta-Cincinnati.....	186,296	7,325	3,130,640	29.0	16,172	3,904,236	80.19
Eastern Air Lines, Inc.....Total	—	—	—	—	—	—	—
Boston-San Antonio or Brownsville.....	—	—	—	—	—	—	—
Boston-Miami.....	—	—	—	—	—	—	—
Chicago-Jacksonville.....	—	—	—	—	—	—	—
Atlanta-Miami.....	—	—	—	—	—	—	—
Washington-St. Louis.....	—	—	—	—	—	—	—
Essair, Inc., Houston-Amarillo.....Total	63,432	961	287,905	.7	160	570,888	50.43
Inland Air Lines, Inc.....Total	153,408	4,809	1,427,098	4.5	1,009	2,093,082	68.18
Denver-Great Falls.....	119,552	4,339	1,198,013	3.8	844	1,780,850	67.27
Cheyenne-Huron.....	33,856	866	229,085	.7	165	312,232	73.37
Mid-Continent Airlines, Inc.....Total	342,274	14,246	4,514,706	21.6	7,016	6,010,984	75.11
Minneapolis-Tulsa.....	218,544	10,137	3,208,154	17.1	5,742	4,360,503	74.95
Minneapolis-Des Moines, St. Louis or Kansas City.....	123,730	4,418	1,246,552	4.5	1,274	1,650,481	75.53
National Airlines, Inc.....Total	487,631	10,826	5,540,491	20.9	9,045	6,469,561	85.64
New York-Key West via Miami.....	363,269	8,122	4,076,515	12.9	3,785	4,805,734	84.83
Jacksonville-New Orleans.....	124,365	3,518	1,463,976	8.0	3,256	1,663,827	87.99
Northeast Airlines, Inc.....Total	239,128	17,916	3,938,953	15.6	2,822	5,571,831	70.69
Boston-Montreal or Presque Isle and Moncton.....	96,504	5,842	1,388,303	5.8	944	2,250,759	61.08
Boston-New York.....	142,624	12,074	2,550,650	9.8	1,878	3,321,072	76.80
Northwest Airlines, Inc.....Total	1,242,620	28,704	20,259,710	138.1	88,353	23,652,435	85.66
Chicago-Twin Cities-Seattle; Fargo-Winnipeg.....	928,099	27,246	15,470,074	93.1	55,821	17,908,869	86.38
Minneapolis-Duluth.....	11,808	860	125,840	1.0	185	243,490	51.68
Minneapolis-New York.....	302,713	6,408	4,663,796	44.0	32,347	5,500,076	84.80
Pennsylvania-Central Airlines Corp.....Total	1,013,237	56,535	16,549,747	287.0	74,713	21,080,060	78.51
Norfolk-Detroit.....	512,964	36,428	8,382,265	138.0	30,773	10,683,705	78.46
Detroit-Milwaukee or Chicago.....	242,631	18,316	3,973,239	84.0	20,268	5,073,837	78.31
Washington-Buffalo.....	36,053	1,862	552,748	5.0	1,600	748,319	73.87
Pittsburgh-Buffalo.....	7,459	553	107,143	3.0	398	156,247	68.57
New York-Birmingham.....	189,221	7,417	3,189,915	54.0	21,323	3,900,331	81.79
Norfolk-Knoxville.....	24,909	1,285	344,437	3.0	661	517,621	66.54
Transcontinental & Western Air, Inc.....Total	2,596,947	40,854	39,039,615	372.0	342,678	43,476,297	89.80
New York-San Francisco.....	1,664,264	31,375	25,297,451	316.0	226,763	27,666,576	91.44
Dayton-Chicago.....	37,988	2,361	722,303	10.0	2,370	768,285	94.01
Winalow-San Francisco.....	215,652	7,462	2,934,579	24.0	8,698	3,423,841	85.71
Kansas City-Pittsburgh via Chicago.....	424,572	9,681	6,139,424	163.0	88,966	6,649,881	92.32
St. Louis-Detroit via Cincinnati and Dayton.....	131,086	6,606	1,978,235	42.0	9,729	2,486,102	79.57
Washington-Dayton via Columbus.....	74,223	3,472	1,194,382	12.0	3,699	1,458,119	81.91
Pittsburgh-Boston.....	51,162	1,649	773,241	5.0	2,453	1,023,493	75.55
United Air Lines, Inc.....Total	3,651,305	69,052	50,414,578	450.4	466,188	58,904,695	85.59
New York-San Francisco.....	2,729,908	35,425	34,646,032	337.5	391,817	40,487,832	85.57
Salt Lake City-Seattle.....	237,798	7,845	3,653,030	11.6	29,173	4,872,914	74.97
Seattle-San Diego.....	564,574	26,306	10,234,395	82.8	38,321	11,253,080	90.95
Seattle-Vancouver.....	12,822	1,812	227,749	5.4	671	274,143	83.08
Washington-Toledo.....	44,701	1,992	789,267	5.0	2,407	890,870	88.60
Cleveland-Boston.....	49,817	1,619	782,405	5.8	3,580	882,036	88.70
Denver-Cheyenne.....	11,685	860	81,700	2.3	219	243,770	33.52
Western Air Lines, Inc.....Total	564,569	23,683	9,487,236	73.3	26,796	11,671,190	81.29
San Diego-Salt Lake City.....	298,058	11,691	4,901,587	38.9	16,192	6,230,672	78.67
Salt Lake City-Great Falls.....	60,725	2,745	915,354	5.8	1,194	1,250,407	73.20
Great Falls-Lethbridge.....	9,608	684	97,525	.6	85	189,197	51.55
Los Angeles-San Francisco.....	196,178	9,859	3,572,770	28.0	9,325	4,000,914	89.30
Total.....	—	—	—	—	—	—	—
Caribbean Atlantic Airlines, Inc., San Juan-Mayaguez and Christiansted.....Total	—	—	—	—	—	—	—
Colonial Airlines, Inc., New York-Montreal.....Total	148,200	7,742	2,487,420	8.9	2,407	3,115,380	79.84
Hawaiian Airlines, Ltd., Honolulu-Hilo and Port Allen.....Total	120,280	16,407	2,286,040	281.4	44,378	2,470,656	92.53
Grand Total.....	—	—	—	—	—	—	—

¹ The total passengers carried for each airline is an unduplicated figure.

Domestic Air Carrier Statistics—Continued

Operations for Calendar Year 1945 as Compared with Calendar Year 1944

Operator	Revenue miles flown January-December		Revenue passengers carried (unduplicated) January-December		Revenue passenger miles flown January-December	
	1945	1944	1945	1944	1945	1944
All American Aviation, Inc.	1,460,205	1,212,089	0	0	0	0
American Airlines, Inc.	47,892,114	34,582,237	1,299,287	929,902	801,219,311	572,094,112
Braniff Airways, Inc.	8,247,545	5,412,785	340,954	225,007	147,098,680	94,965,133
Chicago & Southern Air Lines, Inc.	5,277,656	2,882,381	197,541	104,906	86,876,826	49,242,103
Continental Air Lines, Inc.	3,917,391	2,371,493	124,055	66,808	52,120,938	23,823,438
Delta Air Corporation	5,990,792	3,499,726	274,823	164,287	104,747,686	63,743,996
Eastern Air Lines, Inc.	319,142	17,229,141	4,452	184,987	1,347,993	269,298,050
Essair, Inc.	1,750,406	1,229,119	58,996	24,075	18,377,422	7,610,081
Inland Air Lines, Inc.	3,365,554	2,248,892	152,784	74,145	44,380,221	21,312,458
Mid-Continent Airlines, Inc.	5,838,290	3,363,894	140,739	112,756	70,210,637	40,337,997
National Airlines, Inc.	2,287,366	1,023,104	175,608	53,766	38,939,107	12,847,261
Northeast Airlines, Inc.	12,488,352	7,405,477	330,489	182,157	218,469,772	120,475,305
Northwest Airlines, Inc.	11,290,299	5,313,559	730,984	413,264	191,354,185	90,119,936
Pennsylvania-Central Airlines Corp.	31,873,779	21,599,536	555,966	393,494	513,038,895	347,841,327
Transcontinental & Western Air, Inc.	40,101,047	29,666,110	772,013	504,899	508,978,698	456,514,989
United Air Lines, Inc.	5,528,603	3,194,491	232,807	122,768	98,728,465	57,342,927
Western Air Lines, Inc.						
Total		142,234,034		3,860,221		2,229,571,113
Index (1944 = 100)		100.00		100.00		100.00
Caribbean Atlantic Airlines, Inc.		210,974		19,470		1,353,440
Colonial Airlines, Inc.	1,718,684	1,056,116	93,252	56,032	29,333,379	17,387,268
Hawaiian Airlines, Ltd.	1,207,098	949,588	159,803	110,242	22,755,889	15,824,028
Grand Total		144,450,712		4,045,965		2,264,135,849
Index (1944 = 100)		100.00		100.00		100.00

Operator	Express carried (tons) January-December		Express ton-miles flown January-December		Passenger seat-miles flown January-December		Revenue passenger load factor (percent) January-December	
	1945	1944	1945	1944	1945	1944	1945	1944
All American Aviation, Inc.	68.8	70.7	10,672	10,836	0	0	—	—
American Airlines, Inc.	13,357.5	11,509.3	6,891,432	5,383,756	891,243,504	636,211,268	89.90	89.92
Braniff Airways, Inc.	1,115.1	686.2	502,528	319,417	165,036,881	106,290,451	89.13	89.34
Chicago & Southern Air Lines, Inc.	884.7	554.3	370,774	230,522	109,596,160	59,653,713	79.27	82.55
Continental Air Lines, Inc.	202.0	102.9	91,413	41,263	67,425,802	27,220,273	77.30	87.52
Delta Air Corporation	663.2	476.8	249,126	175,962	124,698,043	72,472,175	84.00	90.72
Eastern Air Lines, Inc.	2,944.4	—	1,746,074	—	312,322,409	—	—	86.22
Essair, Inc.	3.1	—	833	—	2,575,314	—	52.34	—
Inland Air Lines, Inc.	52.4	28.1	12,371	5,783	25,495,921	11,135,230	72.08	68.34
Mid-Continent Airlines, Inc.	214.8	128.8	65,579	35,532	58,588,305	27,454,494	75.75	77.03
National Airlines, Inc.	250.0	204.6	127,231	71,676	78,535,607	46,028,057	89.40	87.64
Northeast Airlines, Inc.	202.7	68.6	38,373	13,333	52,290,820	21,617,222	74.47	59.43
Northwest Airlines, Inc.	1,476.5	1,153.3	867,079	621,640	247,153,665	142,509,826	88.39	84.54
Pennsylvania-Central Airlines Corp.	3,865.6	2,444.6	896,749	465,850	233,442,634	110,140,413	81.97	81.82
Transcontinental & Western Air, Inc.	8,417.6	6,737.8	4,518,865	3,533,018	568,303,035	379,534,508	90.28	91.65
United Air Lines, Inc.	5,967.9	5,447.7	5,058,193	4,222,853	641,318,568	475,613,300	93.40	95.98
Western Air Lines, Inc.	702.5	447.9	299,480	216,516	113,356,576	64,690,168	87.10	88.64
Total		33,006.0		17,094,031		2,492,893,507		89.44
Index (1944 = 100)		100.00		100.00		100.00		100.00
Caribbean Atlantic Airlines, Inc.		101.4		7.945		1,876,032		72.14
Colonial Airlines, Inc.	111.7	127.4	33,004	39,440	36,039,555	22,036,040	81.39	78.90
Hawaiian Airlines, Ltd.	3,254.6	3,634.7	496,367	561,518	24,288,624	16,852,632	93.69	93.89
Grand Total		36,869.5		17,702,934		2,533,658,211		89.36
Index (1944 = 100)		100.00		100.00		100.00		100.00

	January	February	March	April	May	June	
Passengers carried (unduplicated) total revenue and non-revenue: ¹							
17 domestic airlines	363,276	341,980	452,744	458,924	520,257	557,622	
Total airlines	379,954	357,125	470,654	476,644	537,564	583,968	
Passenger miles flown (total revenue and non-revenue):							
17 domestic airlines	209,288,931	190,324,414	251,170,561	256,892,372	289,846,496	306,872,654	
Total airlines	212,308,947	193,041,242	254,553,089	260,301,209	293,224,437	311,752,948	
	July	August	September	October	November	December	Total
Passengers carried (unduplicated) total revenue and non-revenue: ¹							
17 domestic airlines	599,741	642,616	614,787	655,154	630,340		
Total airlines	630,730	677,598	642,983	683,957	658,449		
Passenger miles flown (total revenue and non-revenue):							
17 domestic airlines	331,639,158	343,928,310	329,276,363	353,526,547	328,599,828		
Total airlines	337,427,431	350,535,182	334,774,727	359,199,060	333,671,205		

1 Preliminary. Due to the delay in reporting by some companies, these figures are subject to revision in subsequent publications.

Airline Turns Manufacturer

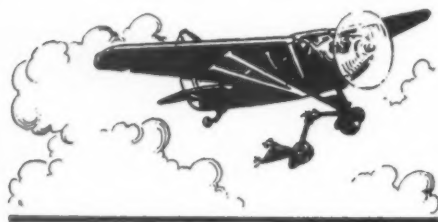
A British pre-war airline and charter company, Portsmouth Aviation, has decided to enter the manufacturing industry. The prototype of its first product, the Aerocar, will soon be making its test flights. The Portsmouth company organized and ran short routes and charter flying services in 1932, and continued them until the outbreak of war.

CAB Defers Action

The meeting of representatives of the United States and the United Kingdom at Bermuda January 15, caused the Civil Aeronautics Board to defer further consideration of the resolution of the International Air Transport Association for the establishment of air traffic conferences.

Court Vetoes Nationalization

The Full High Court of the Commonwealth of Australia has ruled that federal legislation to nationalize existing interstate airlines is invalid. The decision followed an appeal by three airline companies involved. The five judges unanimously overruled the Commonwealth's contention that the legislation was valid.



Structural Failure—The report of the Civil Aeronautics Board gives structural failure as the probable cause of the accident to a Transcontinental and Western airliner near Hanford, Calif., in which 21 passengers and three crew members were killed. The liner was on scheduled flight from San Francisco to New York on Nov. 4, 1944.

Departure from San Francisco was delayed about one hour while necessary small repairs were made. These were certified as satisfactory by a Civil Aeronautics Administration Air Carrier Maintenance Inspector. They were not, the Board reports, "material to the accident."

The flight proceeded according to plan and at last contact the crew was given a routine message which was acknowledged. At intervals of a few minutes thereafter unsuccessful efforts were made to contact the airship again.

A number of persons near Hanford saw the plane entering a rapidly forming thunderstorm and almost immediately parts of the craft were seen falling from the base of the overcast at an altitude of about 1,500 feet.

Due to cloud conditions in the general area it cannot be definitely determined whether the pilots saw the cumulo-nimbus cloud before they flew into it. From all information available it appears most probable that they were flying between two layers of clouds before reaching the storm. If this is correct both the bottom and top of the storm cloud would have been hidden, and it is further possible that other types of clouds near the cumulo-nimbus could have obscured the cumulo-nimbus sector that otherwise would have been visible. This condition could very well have given the appearance of the two cloud layers converging and thus give no clue to the pilot that he was encountering a cumulo-nimbus cloud.

This is pertinent in that it is entirely possible that the pilots might have been taken by surprise on entering the turbulent cloud.

A detailed examination of the wreckage and the airplane's maintenance record led to the following significant conclusions:

The left wing had failed initially in a downward direction, with respect to the fuselage just outboard of the landing light.

The horizontal tail surfaces had also failed in flight.

There was no evidence of a mechanical failure in any other part of the aircraft's structure, nor in the controls, engines, propellers, instruments or accessories except that which resulted from the initial failure.

No evidence was found that there had been any weakening of the aircraft's structure prior to the accident, nor that the airplane's maintenance had been below standard.

There was no evidence of any explosion or fire in the air; damage by lightning or hail; or of collision with any object in flight.

Based on all the evidence available, the Board concludes that structural failure occurred while the airplane was inverted, or certainly not in a normal flight attitude. This being true, severe turbulence would naturally cause structural failure of the airplane, whereas it would be improbable that failure would have occurred had the plane remained in a

Report on CAR Violations

During the 1945 fiscal year the Civil Aeronautics Administration's Legal Office considered 1,540 charges of violations of Civil Air Regulations lodged against civilian pilots.

Of this number, 636 were students; 328, private pilots; 478, commercial; 6, airline pilots; and 92, uncertificated. Civil penalties imposed amounted to \$5,690, divided between the CAA (\$4,840) and the Attorney General's office (\$850).

Accidents involving violations of safety regulations numbered 426. The number of deaths in these accidents was 173.

The student pilot was the chief offender with 171 accidents and 51 deaths. Next was the commercial pilot, 122 accidents and 50 deaths. Only one airline pilot was involved in an accident of this kind and that without fatality.

Applications for pilot certificates made by persons of foreign birth or descent numbered 321. Of this number 133 were eligible; 13 were denied and 31 applications are pending. Applications referred to the Provost Marshal General numbered 144. Forty-one of the applicants were Japanese by race or nationality. Thirteen were eligible; 2 denied; 8 are pending; and 18 were referred to the Provost Marshal. German applicants totaled 209. There were 82 eligible; 11 denied; 19 are pending; and 97 referred to the Provost Marshal.

normal flight attitude. The reason for the airplane becoming inverted can only be surmised.

The probable cause of this accident, according to Board findings, was the failure of the airplane's structure as a result of severe turbulence. An important contributing cause was the fact that the airplane was undoubtedly in an abnormal attitude of flight, inverted, at the instant of structural failure.

On Local Pleasure Flight—While practicing a simulated forced landing about three miles southeast of the Sullivant Avenue Airport, Columbus, Ohio, Pilot Bernard F. Houchin crashed with resultant fatal injuries to himself and his passenger, Edward L. Scott. The aircraft was destroyed by impact and fire.

Houchin, 36, held a private certificate with a single-engine land rating and had flown about 226 hours including approximately 91 in the type aircraft involved. Both he and his passenger were residents of Columbus.

Houchin and Scott took off from the Sullivant Avenue Airport for a local pleasure flight. Following this they were observed flying low in what appeared to be simulated emergency landing practice. During the last of these the pilot made a 180° approach to a suitable field and apparently went into a slipping left turn to hit the desired spot. He started to straighten out, but before he could do so the left wheel struck the ground causing the plane to bounce to a height of 15 or 20 feet. It settled from this bounce in a forward motion and the left wing struck a fence post. The plane then bounced or cartwheeled approximately 118 feet and burst into flames.

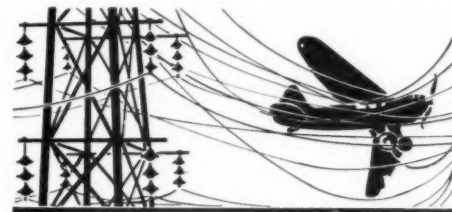
Due to the extent of damage by impact and fire little could be determined from an examination of the wreckage. Indications were that power was being developed at the time of impact. The pilot used poor judgment in carrying a simulated forced landing to such an extremely low altitude.

The probable cause of this accident was failure to recover from a slipping turn in time to avoid striking the ground.

Plane Hits Wires—Harry Alexander Rogers and L. M. Pitzer were seriously injured in an accident which occurred about six miles north of Temple, Tex.

Rogers, 32, of Rogers, Tex., held a commercial pilot certificate with single-engine land and instructor ratings. He had flown about 400 hours, all in the type aircraft involved. Pitzer was not certificated as an airman.

Rogers, occupying the rear seat, and accompanied by Pitzer, took off from Temple Municipal Airport. This was Pitzer's second dual instructional flight. The plane was flown north of Temple and it appears that simulated forced landings were practiced. During one of these, while approaching a suitable field



toward the north, the plane struck wires which ran from a road to a house about 500 feet away, and nosed into the ground.

Investigation did not reveal any malfunctioning of the aircraft or its components. The weather was good with no impairment of visibility. Instructor Rogers did not have his safety belt fastened which undoubtedly contributed to the seriousness of his injuries.

The probable cause of this accident was collision with wires during a simulated forced landing carried to an unnecessarily low altitude.

Elevator Out of Control—An accident at Fraser, Mich., following loss of elevator control, resulted in serious injuries to Herman D. Rowe, minor injuries to his brother, Samuel Howard Rowe, and major damage to the aircraft.

Pilot Samuel Howard Rowe, 33, held a commercial certificate with single-engine land and flight instructor rating. He had flown approximately 1,470 hours including four in the type aircraft involved. Herman D. Rowe, 26, was not certificated as an airman but was taking flight instruction. Both men were residents of Detroit.

Instructor Rowe and his brother took off from Joy Airport, Fraser, for a local instruction and pleasure flight. At an altitude of approximately 1,000 feet the instructor trimmed the plane for straight and level flight. He then discovered that the control rod between the rear stick and the bell-crank had become disconnected rendering the elevator controls inoperative. Instructor Rowe returned to the airport, controlling the plane longitudinally by use of the stabilizer, varying the engine speed and having his brother move back and forth in the rear cockpit. At an altitude of about 50 feet he throttled the engine preparatory to landing and the plane nosed down. Despite application of power he could not check the oscillation and the plane struck the ground nose-first.

Investigation disclosed that while making a periodic inspection a mechanic failed to safety the nut and bolt which secures the control rod to the elevator bell-crank. This bolt dropped out of place in flight.

The probable cause of this accident was loss of elevator control due to an unsafetied bolt. A contributing factor was carelessness of the mechanic who made the periodic inspection and of the pilot-owner in not making thorough line inspections.

(See Accident Reports, next page)

Accident Reports

(Continued from preceding page)

Pilot Loses Way—Failure to utilize available fuel caused engine stoppage over terrain unsuitable for landing resulting in an accident near Rock Springs, Tenn. Pilot Barbara Donahue and Passengers William L. Burton II, Rochard J. Murphy and John Daugherty, all of New York City, were seriously injured.

Miss Donahue, 25, held a commercial certificate with single and multi-engine land, instrument and flight instructor ratings. She had flown approximately 1,500 hours including 150 in the type aircraft involved and 100 at night.

The flight refueled at Birmingham, Ala., and took off from the Municipal Airport for Tri-City Airport, Tenn. A tail wind was forecast for 6,000 feet and this altitude was flown to near Chattanooga where it was necessary to descend to 3,000 feet because of lowering ceilings. Shortly beyond Knoxville weather conditions fell below contact minimums and the pilot turned from the radio range in an attempt to follow the river into Tri-City. In so doing she became confused, misjudging her time and distance, and decided to return to Knoxville. After reestablishing her position she turned to fly a direct course to Tri-City. By this time it was dark. Shortly thereafter the engine failed and the pilot stalled the plane into the crest of a hill. Weather conditions in the area were adverse with visibility one-fourth mile, ceiling about 300 feet, light fog in the valleys, heavy fog on the hillslopes.

Investigation revealed that the engine failed due to lack of fuel in the left tank to which the fuel valve was turned. The right tank was about one-half full.

Low-Altitude Stall—A stall at low altitude shortly after take-off from DuPont Airport, Wilmington, Del., resulted in an accident in which Arthur Jones, Jr., of Hollis, L. I., N. Y., was killed and Thomas Francis Buck, of New York City, received critical injuries. The aircraft was demolished by impact and fire.

Buck, 30, held a student pilot certificate and had flown approximately 1,400 solo hours including 55 in the type plane involved. Jones, 26, was not certificated as a civilian pilot. However, he had accumulated about 1,800 hours in Navy equipment and had flown approximately 25 dual and solo hours in the aircraft involved.

Jones, occupying the right seat, and Buck, the left, took off for a cross-country flight. About 25 feet over the airport the plane began to "mush" and continued in this attitude to a point 1,800 feet northwest of the field where it was stalled into trees in a densely wooded area. Shortly thereafter a muffled explosion occurred and the plane burst into flames.

Buck stated that he was attempting to contact the control tower when Jones took off and failed to realize the stalled condition of the plane immediately. When he did become aware of it he applied forward pressure and full throttle but was unable to avert the accident. According to him the controls and engine were functioning normally during the entire flight. Investigation disclosed that the aircraft was loaded in excess of its authorized limits. One of the flight instructors at the airport stated that the "air condition was unstable, gusty, with strong downdrafts over the wooded area in the vicinity where the aircraft crashed."

The probable cause of this accident was a stall at an altitude too low for recovery. The overloaded aircraft and the atmospheric conditions were contributing factors.

On Test Flight—A stall from a climbing turn at low altitude resulted in fatal injuries to Pilot Dillon

CAA Proposes Method to Locate Private Pilots Down in Wild Areas

Assurance that private pilots who contemplate flying over rugged or sparsely settled terrain will not "stay lost" if forced down is provided in "reporting" arrangements set up by the Civil Aeronautics Administration and approved by the Non-Scheduled Flying Advisory Committee.

Tentative Plans Approved—Approval of tentative plans for such work by the CAA has been given by the Non-Scheduled Flying Advisory Committee. The plans were drawn by the Office of Federal Airways, and they place the communications facilities of the CAA at the service of any private pilot who chooses to file with any CAA communications station a plan for the flight he proposes to make. Filing of such a plan is purely voluntary, however, and is not required from any pilot who is making a "contact" or non-instrument flight.

How Plan Works—According to the CAA's plan, the estimated time of arrival of the pilot at his ultimate destination is the key item of a flight plan. If the pilot fails to arrive within two hours of his estimated arrival time, the CAA communications operator at his point of departure contacts the operator at the point of destination, and a check of the pilot's movements is started. If he does not arrive within four hours, an actual search will be started.

This search would involve notification by the CAA to the intermediate stations along the route, the U. S. Army and Coast Guard, state aviation commissions, the state police, private fliers, and organizations of private fliers, such as clubs, and CAA pilots on duty in the vicinity. In the past many such searches have been conducted at great expense. The Non-Scheduled Flying Advisory Committee proposed that a pilot who files a flight plan and then fails to complete it by notifying the CAA of his safe arrival be subjected to a fine of \$25. The recommendation is under study by the CAA.

The tentative plan also has been submitted to the Aircraft Owners and Pilots Association for their opinions and recommendations.

Heretofore searches of this kind have been conducted by volunteer pilots, and in many cases, CAA pilots have been assigned to the task by local CAA

Ray Conn and Mechanic Almon L. Fullmer, both of Clovis, New Mex., near the Hillcrest Airport, Clovis. The aircraft was demolished.

Conn, 29, held a private certificate with a single-engine land rating and had flown approximately 186 hours including 50 in the type aircraft involved. He had been issued a medical waiver because of an artificial left leg. Fullmer was certificated as an aircraft and engine mechanic and was employed by Conn as a part-time mechanic.

Conn and Fullmer took off from Hillcrest Airport (approximately 4,300 feet above sea level) for a test flight following minor repairs and a 20-hour engine check which Fullmer had completed, on the plane earlier in the day. About one-half mile from the airport the plane was seen to enter a shallow dive from approximately 150 feet, followed by a steep climb. At an altitude of about 200 feet a left turn was started and the plane was stalled. It fell off to the left and dived to the ground, striking almost vertically on the nose.

Investigation disclosed no evidence of failure of any part of the plane prior to the accident. The switch was off and had apparently been turned to that position by the pilot prior to impact. A safe landing could have been made straight ahead had engine failure occurred. Evidence indicates that Conn climbed the plane too steeply after take-off and attempted a turn at minimum airspeed.

The probable cause of this accident was an inadvertent stall at low altitude from which recovery was not effected.

officials. In some searches, considerable expense in time and money has been expended, while the pilot has been safe in some other city to which he decided to go after taking off. In most instances, however, little centralized direction or authority has been in force when a search is necessary. It is expected that discussion with representatives of the industry and the private flier will result in a search method and procedure which will be more efficient and less expensive.

Among other recommendations of the Non-Scheduled Flying Advisory Committee at its recent meeting were:

It was pointed out that the Emergency Rescue Branch of the Army Air Force is expected to make available its services in rescue work.

Airmarking should be extended in scope but should be performed by the States. Further study should be given to proposed changes in air traffic patterns within approach zones.

The policy of the CAA in designating inspection representatives was approved, with the suggestion that these inspectors be so placed geographically that they would be accessible to the largest number of pilots.

The Committee approved changes in the Civil Air Regulations which put more responsibility on the instructor.

Reject Fines Plan—The Committee turned down a proposal that fines be imposed on pilots who are convicted of reckless flying, stating that suspension of the pilot's license is adequate punishment. The Committee favors education in safety by pilots and other private organizations, and asked that more complete statistics be gathered on flying accidents.

The CAA's airport policy should be to produce as many small airports with the money available as possible. Speakers favored many small sod-covered airports in preference to a few expensive airports with fine facilities such as paved runways, pointing out that the rural market for airplanes is three times the urban market. Some members of the Committee favored piece-meal construction with funds available, providing usable landing facilities are produced. The Committee favored local police action against reckless fliers.

Arthur I. Boreman was re-elected chairman and all other members were re-elected. Douglas Robinson, representing private flying in the sixth CAA region, has resigned, due to other activities. His position has not been filled.

Radio Manual is Valuable Aid To Pilots Using U. S. Airways

Pilots who wish to make full and efficient use of airway radio facilities and aircraft radio equipment will find CAA Bulletin 29—"Pilots' Radio Manual"—very helpful.

This manual contains a glossary of radio terms plus a brief theoretical discussion of radio; application of radio in communication between aircraft in flight and ground stations; radio aids to navigation; bonding and shielding of aircraft; antenna installations; and airport control tower procedures and phraseologies.

The bulletin sells for 25 cents a copy and may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Airline Orders Service

No. 4304 orders that United Air Lines be notified that the national defense no longer requires delaying inauguration of service at the intermediate point Detroit, Mich., on route 1. (Dec. 11)

No. 4305 permits Eastern Air Lines to inaugurate on or about Dec. 10, 1945, nonstop service between Louisville, Ky., and Atlanta, Ga., on route 10. (Dec. 11)

No. 4306 denies petition of American Airlines for reconsideration and revocation of the Board's order of consolidation—No. 4205. (Dec. 11)

No. 4307 designates Pan American Airways and American Overseas Airlines to utilize 7 landing rights each per wk. in the United Kingdom, but not exceeding a total capacity of 250 seats per wk. (Dec. 13)

No. 4308 denies petition of Plantation Air Lines for consolidation of its application in the Kansas City—Memphis—Florida Case. (Dec. 14)

No. 4309 permits American Airlines to inaugurate on Dec. 15, 1945, nonstop service between Battle Creek, Mich., and Chicago, Ill., on Route 7. (Dec. 14)

No. 4310 orders that the certificate issued to Arthur G. Woodley, Letha M. Woodley and Mary E. Diamond, doing business as Woodley Airways, be reassigned so as to reflect the change in the name from Woodley Airways to Pacific Northern Airlines. (Dec. 17)

No. 4311 grants Northwest and Eastern Airlines permission to intervene in the application of American Airlines for approval of control of Mid-Continent Airlines by American. (Dec. 17)

No. 4312 permits American Overseas Airlines to serve Stockholm, Sweden, Oslo, Norway, and Copenhagen, Denmark, on Dec. 17, through the use of Bromma, Gardermoen and Kastrup Airports, respectively. (Dec. 17)

No. 4314 temporarily exempts Transcontinental and Western Air from the terms of its certificate insofar as they would prevent TWA from substituting Geneva for Bern, Switzerland in its approved service plan; Bern cannot be served at present because of airport conditions. (Dec. 18)

No. 4315 permits Eastern Air Lines to inaugurate on Dec. 15, 1945, nonstop service between Akron, Ohio and Greensboro, N. Car., on Route 6. (Dec. 18)

No. 4318 permits Pan American Airways to serve Cayenne, French Guiana, immediately, through the use of Rochambeau Field. (Dec. 19)

No. 4319 grants the petitions of the Cities of Binghamton, N. Y., Akron, Ohio, Harrisburg and Reading, Pa., Cumberland, Md., the Village of Endicott, N. Y., and the County of Mercer, N. J., for leave to intervene in the Middle Atlantic Area Case. (Dec. 19)

No. 4322 grants the City of Cambridge, Ohio, leave to intervene in the Great Lakes Area Case. (Dec. 19)

No. 4323 upon the request of Mid-Southern Air Lines, dismisses their application. Docket 2079. (Dec. 19)

No. 4324 grants TWA permission to intervene in Docket 2136 re applications of American Airlines for authority to inaugurate nonstop service between certain points. (Dec. 19)

No. 4327 permits EAL to serve Columbia, S. Car., on Jan. 1, 1946, through the use of Lexington County Airport. (Dec. 20)

No. 4329 grants American Overseas Airlines and TWA permission to intervene in the application of Pan American for amendment of its certificate. (Dec. 20)

No. 4330 dismisses application of Northeast Airlines, Docket 682, for a certificate. (Dec. 20)

No. 4331 dismisses applications of James Walker Case for certificates. (Dec. 20)

No. 4332 rescinds order No. 2082 which temporarily exempted Pan American from certain provisions of the Civil Aeronautics Act insofar as they would require Pan Am to render service to and from Cat Cay, Bahamas Islands, as an intermediate point on its route between Miami and Nassau. (Dec. 21)

No. 4334 permits TWA to inaugurate on or about Jan. 1, 1946, service to Chicago, Ill., and Madrid, Spain, through the use of Chicago Municipal and Barajas Airports. (Dec. 21)

No. 4335 permits Western Air Lines, Continental Airlines and Orleans Airport Commission of the City of New Orleans, La., to intervene in the application of American Airlines for approval of control of Mid-Continent Airlines by American. (Dec. 21)

No. 4337 permits Pennsylvania-Central Airlines to serve Newark, N. J., on its route 55, on or about Jan. 1, 1946, through the use of Newark Municipal Airport. (Dec. 21)

No. 4338 authorizes Pan American Airways to suspend service between the terminal points New York, N. Y., and Hamilton, Bermuda, beginning Dec. 27, 1945, until such time as a suitable area in Bermuda is made available for the operation of land-planes. (Dec. 27)

No. 4339 amends certificates of Northwest and National Airlines so as to designate Newark, N. J., as a co-terminal point with New York, N. Y. (Issued with an opinion—Dec. 27)

No. 4341 permits American Airlines to serve Springfield, Mo., on route 30, on or about Jan. 1, 1946, through the use of Springfield-Green County Airport. (Dec. 27)

No. 4342 permits Colonial Airlines to inaugurate service at Ottawa, Canada, on route 72-F, on or about Jan. 3, 1946, through the use of Uplands Municipal Airport. (Dec. 27)

No. 4343 denies application of Pan American-Grace Airways—Docket 2160—for an exemption order under sec. 416(b) of the Act. (Dec. 28)

No. 4344 permits Western Air Lines to serve El Centro, Calif., on route 13, immediately, through the use of Holtville Auxiliary Airport. (Dec. 29)

No. 4345 permits Western Airlines to inaugurate on Jan. 1, 1946, nonstop service between Salt Lake City, Utah, and Butte, Mont., on route 19. (Jan. 2)

No. 4346 denies motion filed by Pan American for consolidation of its application in Docket 2076 with the application of American Overseas Airlines in Docket 2165; defers action on Pan Am's petition for leave to intervene in the proceeding in Docket 2165. (Jan. 2)

No. 4347 grants the City of Newark, Ohio, leave to intervene in the Great Lakes Area Case. (Jan. 3)

No. 4348 dismisses several applications of Pennsylvania-Central Airlines which had been consolidated into the Middle Atlantic Area Case—Docket 674 et al. (Jan. 3)

No. 4350 grants the Cities of Barnesville, Circleville and Mansfield, Ohio, leave to intervene in the Great Lakes Area Case—Docket 535 et al. (Jan. 3)

No. 4352 permits Pennsylvania-Central Airlines to inaugurate on Jan. 1, 1946, nonstop service southbound between Rochester, N. Y., and Washington, D. C., on Route 34. (Jan. 4)

No. 4356 dismisses, upon the request of John C. Van Son, applications for certificates. (Jan. 4)

No. 4357 permits Pan American Airways to inaugurate service on Jan. 3, 1946, with landplane equipment, to Hamilton, Bermuda, through the regular use of Kindley Field. (Jan. 4)

No. 4358 permits Pennsylvania-Central to inaugurate on Jan. 1, 1946, nonstop service between Norfolk, Va., and Raleigh, N. Car., and between Greensboro, N. Car. and Knoxville, Tenn., on Route 31. (Jan. 5)

No. 4360 permits Western Air Lines to inaugurate on Jan. 1, 1946, nonstop service between Los Angeles and San Diego, Calif., on Route 13. (Jan. 9)

No. 4362 permits Delta Air Corp. to serve Columbia, S. Car., on Jan. 15, 1946, through the use of Columbia Army Air Base. (Jan. 9)

No. 4363 consolidates applications of Richard W. Putnam, J.H.A. Dartmouth Airways, Docket 2156, Norfolk Northern Airlines, Docket 2151, and United Air Lines, Docket 2150, for hearing in the Middle Atlantic Area Case. (Jan. 9)

No. 4364 grants petitions of the Cities of Richmond, Va., Youngstown, Ohio, Elmira and Rochester, N. Y., New Haven, Conn., Williamsport, Pa., and the State of Conn., leave to intervene in the Middle Atlantic Area Case; denies petition of the City of Toledo, Ohio, to intervene in the same proceeding. (Jan. 9)

No. 4365 temporarily exempts Delta Air Corp., Eastern Air Lines and Pan American from the provisions of sec. 401 of the Act insofar as they would prevent the 3 airlines from landing and taking off their regular daylight schedule flights at Kenner-Moisant Airport, New Orleans, La., on Jan. 13, 1946, in addition to the regular stops at New Orleans, and from taking on mail, if any, is tendered by the Post Office Dept., at Kenner-Moisant Airport. (Jan. 11)

No. 4366 dismisses application of Arthur C. and Letha M. Woodley and Mary E. Diamond—Docket 2044. (Jan. 11)

No. 4367 permits United Air Lines to serve Ogden, Utah, on Jan. 16, 1946, through the use of Robert H. Hinckley Airport. (Jan. 11)

No. 4368 dismisses applications of Metropolitan Airways, Docket 1348, Buffalo Transit Co., Docket 1801, John G. Campbell, Docket 1802, and Pan-Maryland Airways, Docket 1970, from the Middle Atlantic Area Case. (Jan. 11)

No. 4369 dismisses applications of Charles E. Morre, Docket 2039, Lehigh Aircraft Co., Docket 1334, Dickinson Airways, Docket 2121, and Blue Ridge Lines, Docket 1092, from the Middle Atlantic Area Case. (Jan. 11)

No. 4376 permits National Airlines to serve Daytona Beach, Fla., on Jan. 15, 1946, through the regular use of Municipal Airport. (Jan. 14)

No. 4377 permits National Airlines to inaugurate immediately, nonstop service between Jacksonville and Pensacola, Fla., on Route 14. (Jan. 14)

No. 4378 permits National Airlines to inaugurate immediately, nonstop service between West Palm Beach and St. Petersburg, Fla., on Route 31. (Jan. 14)

No. 4383 reinstates application of Northern Airlines, Docket 1602, into the North Central Case, Docket 415 et al. but denies Northern's motions for reconsideration into Docket 415 et al., and immediate hearing on the application. (Jan. 14)

No. 4386 rescinds order No. 1744 which temporarily suspended service by National Airlines at St. Petersburg and Daytona Beach, Fla. (Jan. 14)

No. 4386 permits National Airlines to inaugurate immediately, nonstop service between Tallahassee, Fla., and New Orleans, La., on Route 39. (Jan. 15)

No. 4388 permits United Airlines to inaugurate on Jan. 16, 1946, nonstop services from Cheyenne, Wyo., to Ogden, Utah, and from Ogden to San Francisco, Calif., and from Reno, Nev., to Ogden, on Route 1. (Jan. 15)

No. 4389 dismisses application of Arctic Air Enterprises for a certificate—Docket 2053. (Jan. 15)

No. 4390 temporarily exempts Ray Peterson Flying Service from the provisions of Title IV of the Act, insofar as they would otherwise prevent the carrier from temporarily performing the service which Jim Dodson Air Service is authorized and required to perform; temporarily exempts Jim Dodson Air Service from same provisions, insofar as they would require it to render service; this exemption is effective for 60 days from Jan. 15, and if within this period the aforesaid carrier files an application with the Board requesting approval of the proposed purchase and acquisition of Jim Dodson Air Service by Ray Peterson Flying Service, shall continue until the Board renders its decision upon the application. (Jan. 15)

No. 4391 consolidates various applications proposing additional air services between Boston, Mass., and New Orleans, La., via New York, N. Y., Atlanta, Ga., and other intermediate points, into a single proceeding. (Jan. 15)

No. 4392 grants the City of St. Clairsville, Ohio, leave to intervene in the Great Lakes Area Case. (Jan. 15)

No. 4393 authorizes Pan American to suspend service at Pointe a Pitre Guadeloupe and Fort de France, Martinique, for an additional 90 days starting Jan. 18, 1946. (Jan. 15)

No. 4395 permits United Air Lines to inaugurate on Jan. 16, 1946, nonstop service from Ogden, Utah, to Denver Colo., on Route 1. (Jan. 15)

No. 4396 dismisses application of Greater Washington Taxi Airways, Docket 2162, for a certificate. (Jan. 15)

No. 4397 permits Northwest Airlines to serve Newark, N. J., and New York, N. Y., on Feb. 1, 1946, through the use of Newark Municipal Airport. (Jan. 15)

Miscellaneous

No. 4320 approves an agreement by and between National Airlines and Eastern Air Lines relating to lease of radio site at Jacksonville, Fla., to Eastern. (Dec. 19)

No. 4321 approves an agreement by and between Pennsylvania-Central Airlines and American Airlines relating to use of stewardess quarters at Buffalo Airport. (Dec. 19)

No. 4333 approves an agreement by and between United Air Lines and American Airlines relating to sublease of space at Lindbergh Field, San Diego, to American. (Dec. 21)

No. 4340 permanently suspends and cancels certain revisions of local and joint passenger tariff rules and regulations of the

Pan American Airways System and corrects discriminations (Dec. 27)

No. 4349 prescribes amendment No. 9 to the Uniform System of Accounts for Domestic Air Carriers. Pages 31-12 through 31-14 amended to substitute airport-to-airport mileages for course flown mileages. (Jan. 3)

No. 4351 prescribes amendment No. 4 to the Form of Report of Financial and Operating Statistics for Domestic Air Carriers, Schedules 12 and 13 amended to substitute airport-to-airport mileages for course flown mileages. (Jan. 3)

No. 4361 approves an agreement by and between United Air Lines and Colonial Airlines relating to handling of Colonial's oxygen bottles at New York. (Jan. 9)

Nos. 4400 and 4401 approves interlocking relationships requested in applications of Railway Express Agency, Inc., et al.—Docket 1915. (Jan. 17)

No. 4402 approves interlocking relationships requested in application of E. G. Buckland and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4403 approves interlocking relationships requested in application of Walter S. Franklin and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4404 approves interlocking relationships requested in application of L. O. Head and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4405 approves interlocking relationships requested in application of Scott M. Loftin and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4406 approves interlocking relationships requested in application of Charles T. O'Neal and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4407 approves interlocking relationships requested in application of T. M. Schunacher and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4408 approves interlocking relationships requested in application of L. Warrington Baldwin and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4409 approves interlocking relationships requested in application of Ernest E. Norris and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4410 approves interlocking relationships requested in application of F. W. Charske and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4411 approves interlocking relationships requested in application of Willard F. Place and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4412 approves interlocking relationships requested in application of Ernest E. Norris and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4413 approves interlocking relationships requested in application of E. E. McInnis and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

No. 4414 approves interlocking relationships requested in application of B. W. Scandrett and Railway Express Agency, Inc.—Docket 1915. (Jan. 17)

Airman Orders

Suspensions

No. 4393 suspends commercial certificate of Robert F. Townsend for 6 months because he carried passengers for hire, without parachutes, and performed acrobatics below 1500 ft. near the Mettetal Airport, Plymouth, Mich. Townsend also violated other provisions of the Civil Air Regulations. (Dec. 11)

No. 4328 suspends private certificate of Harvey W. Pinkham for 6 months because he flew at an altitude of from 30 to 100 ft. over cottages on Dodge Pt., Mullet Lake, Mich., and subsequently crashed in the lake near 4 people, contrary to the provisions of sec. 60.3500 of the Regulations. (Dec. 20)

No. 4336 suspends student certificate of Robert B. Fulton for 6 months because he flew less than 500 ft. above the ground, contrary to the provisions of sec. 60.3503 of the Regulations. Fulton also violated other provisions of the Regulations. (Dec. 18)

No. 4372 suspends mechanic certificate of Arthur J. Hartman for 30 days because he presented an aircraft to an inspector for the Administrator for inspection and approval when it was not airworthy. (Jan. 12)

No. 4390 suspends private certificate of Wm. C. Addison for 6 months because he piloted an aircraft, while carrying a passenger in the vicinity of Lumberville, Pa., over the Delaware River, in a reckless manner. Addison descended to an altitude of 200 ft. or less and flew at this altitude for 3 miles down the River, contrary to the provisions of sec. 60.101 of the Regulations. (Jan. 14)

No. 4381 suspends student certificate of Allen Higgins for 6 months because he piloted an aircraft near Medina, N. Y., when he had not had at least 10 solo flying hours, passed a written exam on the required provisions of Part 43 and 60 of the Regulations, and his student certificate had not been appropriately endorsed by his flight instructor, contrary to the provisions of sec. 43.52(a), (b), and (c) of the Regulations. Higgins also violated other provisions of the Regulations. (Jan. 14)

No. 4384 suspends commercial certificate of Jean M. McFarland for 3 months because she left the engine of an aircraft running without a competent operator attending the engine controls. Her passenger was in the plane with her when the engine was started by an attendant. Since Miss McFarland was not paying attention to the direction the plane was traveling, it headed back into shore and went around. Whereupon she got out of the plane, leaving the passenger, and while the motor was running, went ashore to push the plane out into the water again. (Jan. 14)

No. 4385 suspends commercial certificate of John McQuale for 6 months because he made several passes over a congested area at altitudes as low as 50 feet. McQuale also violated other provisions of the Regulations. (Jan. 14)

Revocations

No. 4316 revokes student certificate of Ralph Cummins because he carried passengers, contrary to the provisions of sec. 43.50 of the Regulations. (Dec. 11)

No. 4317 revokes private certificate of George B. Moore because he flew at less than 1,000 ft. over an open-air assembly of persons. (See Official Actions, next page)

Official Actions

(Continued from preceding page)

contrary to the provisions of sec. 60.3502 of the Regulations. (Dec. 19)

No. 4325 revokes student certificate of Richard P. Wisland because he flew in the vicinity of Milwaukee, Wis., at house-top level, contrary to the provisions of sec. 60.3500 of the Regulations. (Dec. 19)

No. 4329 amends Board order No. 3992 so as to revoke Carl B. Wiemann's private certificate. (Dec. 18)

No. 4371 revokes student certificate of Fred E. Webber because he flew approximately 6 miles west of Rothbury, Mich., and over Lake Michigan and carried a passenger, in violation of sec. 43.50 of the Regulations. (Jan. 12)

No. 4373 revokes private certificate of Albert E. Stearns. On June 1, 1945, Stearns, then the holder of a student certificate, piloted an aircraft in the vicinity of Glen Rose, Tex., and carried a passenger who was not a certificated instructor. Stearns' student certificate was cancelled by the issuance of his private certificate on Sept. 24, 1945. (Jan. 12)

No. 4379 revokes student certificate of Charles G. Casey, Jr., because he carried a passenger and violated other provisions of the Regulations. (Jan. 14)

No. 4382 revokes student certificate of Joseph V. Kummer because he carried a passenger. (Jan. 14)

No. 4394 revokes student certificate of Harry W. Markel because he piloted an aircraft in the vicinity of Columbia, N. J., and carried a passenger. (Jan. 15)

No. 4399 revokes student certificate of George C. Uht because he piloted an aircraft approximately 10 miles southeast of Erie, Pa., and carried a passenger. (Jan. 15)

Miscellaneous

No. 4313 denies request of Frank Hall for reconsideration of Board order dated Oct. 10, 1945, which revoked his student certificate. (Dec. 18)

No. 4326 denies request of Leo Gerber Morse for reconsideration of Board order dated Oct. 19, 1945, which revoked his student certificate. (Dec. 19)

No. 4333 dismisses complaint of the Administrator of Civil Aeronautics, with respect to airline transport pilot certificate held by Victor R. Evans, alleging violations of certain Civil Air Regulations not in the public interest. (Jan. 2)

No. 4354 dismisses complaint of the Administrator of Civil Aeronautics, with respect to commercial certificate held by J. Richard Lyons, alleging violations of certain Civil Air Regulations not in the public interest. (Jan. 2)

No. 4355 dismisses complaint filed by the Administrator of Civil Aeronautics against Donald J. Girdley who holds a commercial certificate. (Jan. 4)

No. 4370 dismisses Administrator's complaint alleging certain violations of the Regulations by Philip R. Corby who holds a commercial certificate. (Jan. 12)

No. 4374 amends order No. 4248 so as to discontinue suspension of Robert G. Davidson's student certificate. (Jan. 12)

No. 4398 dismisses Administrator's complaint against Virgil D. Hysell because he has already been involuntarily deprived of his student certificate for 6 months. (Jan. 15)

Regulations

Reg. 340-A.....Effective Dec. 31, 1945

Limited mechanic certificate with propeller or aircraft appliance rating—Special Civil Air Regulation Serial Number 340 is amended by striking "December 31, 1945" and inserting in lieu thereof the words "December 31, 1946."

Reg. 354.....Effective Jan. 2, 1946

Amendment No. 5 of Sec. 228.1 of the Economic Regulations—Free Travel for Postal Employees—is hereby amended to read as follows:

(a) *Postal employees to be carried free.* Every air carrier carrying the mails shall carry, on any plane that it operates and without charge therefor, the following officers, agents and inspectors of the Post Office Department, when such persons are traveling on official business relating to the transportation of mail by aircraft and are accredited as hereinafter provided:

- (1) The Postmaster General.
- (2) The Executive Assistant to the Postmaster General.
- (3) The Assistant Postmaster General who at the time has jurisdiction over all the air mail service, and his Deputy Assistant Postmaster General.
- (4) The Director of the International Postal Service and two Assistant Directors of the International Postal Service.

(5) The Superintendent, Air Mail Service; the Assistant Superintendent, Air Mail Service; the five Regional Superintendents; and the five Assistant Regional Superintendents, Air Mail Service, located respectively at New York, N. Y., Chicago, Ill., San Francisco, Calif., Atlanta, Ga., and Ft. Worth, Tex.

(6) The Superintendent, Thirteenth Division, Railway Mail Service, when traveling between his headquarters in Seattle, Washington and Alaska, or within Alaska, on official business relating to his jurisdiction over the transportation of mail by Aircraft to, from, and within Alaska.

(7) Any inspector of Post Office Department.

(b) *Credentials required.*

(1) Any person described in paragraphs a(1) to a(6), inclusive of this regulation shall be deemed to be duly accredited upon exhibition of a certificate of the Postmaster General that the bearer is one of the persons so described and is entitled to free transportation when traveling on official business relating to the transportation of mail by aircraft, and bearing the signature of the person so described.

(2) Any person described in paragraph a(7) of this regulation shall be deemed to be duly accredited upon exhibition of proper credentials evidencing that he is an inspector of the Post Office Department, and upon presentation of a "Request for Free Transportation by Air" (preferably, but not necessarily on forms supplied by the Post Office Department) executed by him in triplicate and stating:

- (i) That he is an inspector of the Post Office Department;
- (ii) The points from and to which he is to be furnished free

AIR REGULATIONS . . . As of February 1, 1946

TITLE	PART No.	PRICE		DATE LATEST EDITION		No. AMENDMENTS ISSUED	
		Part	Manual	Part	Manual	Part	Manual
Aircraft							
Airworthiness Certificates	01	\$0.05	None	10/15/42	None	1	
Type and Production Certificates	02	.05	\$0.10	3/1/41	3/15/45		
Airplane Airworthiness—Normal, Utility, Aerobatic, and Restricted Purpose Categories	03	Free	None	11/13/45	None		
Airplane Airworthiness	04	.15	.45	11/1/43	7/1/44	3 ¹	
Airplane Airworthiness Transport Categories	04-0	Free	.45	11/1/45	7/1/44	(1)	1
Engine Airworthiness	13	.05	None	8/1/41	None		
Propeller Airworthiness	14	.05	.15 ⁶	7/15/42	6/1/45	1	
Equipment Airworthiness	15	Free	None	4/15/44	7/1/38	1	
Radio Equipment Airworthiness	16	.05	Free	2/13/41	2/13/41		
Maintenance, Repair, and Alteration of Aircraft, Engines, Propellers, Instruments	18	.05	.50	9/1/42	6/1/43		
Airmen							
Pilot certificates	20	.05	None	7/1/45	None	1	
Airline Pilot Rating	21	.05	None	10/1/42	None	3	
Lighter-than-air Pilot Certificates	22	.05	None	10/15/42	None	1	
Mechanic Certificates	24	.05	None	7/1/43	None	1 ²	
Parachute Technician Certificates	25	.05	None	12/15/43	None	1	
Traffic Control Tower Operator Certificates	26	.05	None	10/10/45	None		
Aircraft Dispatcher Certificates	27	.05	None	10/1/43	None	2	
Physical Standards for Airmen	29	.05	None	6/1/42	None		
Operation Rules							
Air Carrier Operating Certification	40	.10	None	10/10/44	None	2	
Scheduled Air Carrier Operations Outside Conti- nental U. S.	41	Free	None	9/1/45	None		
General Operation Rules	43	.05	None	7/1/45	None	3	
Foreign Air Carrier Regulations	44 ³	.05	None	7/1/45	None		
Transportation of Explosives and other Dangerous Articles	49	.05	None	7/1/45	None		
Air Agencies							
Flying School Rating	50	.05	Free	11/1/40	12/40	3	2
Ground Instructor Rating	51	.05	None	12/1/43	None	1	
Repair Station Rating	52	.05	(³)	10/1/42	2/41		
Mechanic School Rating	53	.05	(³)	8/1/42	5/40		
Parachute Loft Certificates and Ratings	54	.05	None	1/21/43	None		
Air Navigation							
Air Traffic Rules	60	.05	.15	8/1/45	8/1/43	1	
Scheduled Air Carrier Rules	61	.10	None	2/1/44	None	5 ⁵	
Miscellaneous							
Rules of Practice Governing Suspension and Revo- cation Proceedings	97	Free	None	7/6/45	None		
Definitions	98	.05	None	10/15/42	None		
Mode of Citation	99	Free	None	11/15/40	None		
Regulations of the Administrator							
Aircraft Registration Certificates	501	Free	None	3/31/43	None		
Recordation of Aircraft Ownership	503	Free	None	3/31/43	None		
Seizure of Aircraft	531	Free	None	12/8/41	None		
Regulations Governing the Distribution and Use of Aviation Gasoline	534	Free	None	9/16/44	None		

¹ Special regulations 228 and 342. ² Special regulation 340. ³ Supersedes Part 66. ⁴ Out of stock. ⁵ Special regulation 342. ⁶ Obtain Manual 14 from CAA Office of Aviation Information, A-240, Dept. of Commerce, Washington 25, D. C.

Note: Those parts and manuals for which there is a price are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances must be by cash or by money order, payable to the Superintendent. Free Parts are obtained from the Publications Section, Civil Aeronautics Board, Washington 25, D. C.; and the free Manuals and Regulations of the Administrator from the CAA Office of Aviation Information, Dept. of Commerce, Washington 25, D. C.

L. M. Sherer Commended

L. M. Sherer, Chief of the Civil Aeronautics Administration Air Carrier Radio and Electrical Section, has been commended by Colonel Gerald B. Brophy for assistance given the communications committee of the Provisional International Civil Aviation Organization. Colonel Brophy is U. S. representative to PICAQ.

transportation, and the amount that would be charged a private passenger therefor; and

(iii) That such travel is on official business relating to the transportation of mail by aircraft, and describing briefly but definitely the nature of such business.

(c) *Requests to be filed.* On or before the tenth day of each month, each air carrier shall forward one copy of all "Requests for Free Transportation by Air" received by it during the second preceding calendar month to the Secretary of the Civil Aeronautics Board, Washington, D. C., and one copy to the Superintendent, Air Mail Service, Post Office Department, Washington, D. C. The third copy shall be retained by the carrier as part of its records.

Reg. 355.....Effective Jan. 4, 1946

Dispatcher Aeronautical Experience—An applicant for an aircraft dispatcher certificate, who after January 1, 1940, acquired any of the aeronautical experience prescribed by §27.15 of the Civil Air Regulations and who has been prevented from completing the required experience on account of his interment by an enemy of the United States or by his services in the armed forces of the United States or of its allies, shall be entitled to credit for such experience as if it had been acquired within the time limitations requirement specified in §27.15. Such applicant must meet the other requirements of Part 27 for the issuance of an aircraft dispatcher certificate.

This regulation shall terminate December 31, 1946.

Type Approvals

(Continued from page 17)

6572A-6 blades; steel hub with aluminum alloy blades; 11 ft. 6 in. diameter; hydraulically controllable feathering; 1300 hp, 1617 rpm. (Type Certificate No. 749, 12-7-45)

Fahlin, model D-585; wood; 74 in. diameter; 51 in. to 43 in. pitch; 85 hp, 2575 rpm. (Type Certificate No. 681, 12-18-45)

Appliances

American Airlines, safety belt, model CDS-5562. Approved for two persons. (Type Certificate No. 107, 11-7-45)

Russell, safety belt, model AE-301F and AE-309. Approved for one or two persons. (Type Certificate No. 90, 11-8-45)

Federal, skis, models A-1500 and A-1850. Approved static load per ski 750 lbs. and 925 lbs. respectively. (Type Certificate No. 82, 11-6-45)

Goodyear, Type III (low pressure) wheels, model L12HBM; 11.00-12. Approved static load per wheel 4650 lbs. (Type Certificate No. 37, 11-11-45)

Goodyear, Type III (low pressure) wheels, model L6NBD; 6.00-6. Approved static load per wheel 1200 lbs. (Type Certificate No. 37, 11-11-45)

Goodyear, Type III (low pressure) wheels, model L17.00-16HBM; 17.00-16. Approved static load per wheel 13,000 lbs. (Type Certificate No. 37, 12-18-45)

Bendix, smooth contour wheels, Type B-3 and B-5; 33 in. Approved static load per wheel 5900 lbs. (Type Certificate No. 79, 12-12-45)

Jacobson, skis, model EAS-222B. Approved static load per ski 800 lbs. (Type Certificate No. 129, 12-10-45)

Hayes, Type III (low pressure) wheels, models 606A, 606M and 606MD; 6.00-6. Approved static load per wheel 1600 lbs. (Type Certificate No. 10, 12-18-45)

Hayes, Type III (low pressure) wheels, models 607A, 607M and 607MD; 6.00-6. Approved static load per wheel 1600 lbs. (Type Certificate No. 10, 12-18-45)

Hayes, Type III (low pressure) wheels, model 608A; 6.00-6. Approved static load per wheel 1600 lbs. (Type Certificate No. 10, 12-18-45)

Fighting Days Over, Service Men Return To Positions in CAA

Eight veterans, possessing invaluable experience in civil aviation, have returned to the Civil Aeronautics Administration, after making important contributions to the winning of the global air war.

These men, who occupied high positions in the CAA before the war, were recognized by the military services and called up to direct training, air transport and organization work as the world-wide air war got under way.

Many of them became world "travelers" in setting up the kind of efficient air operations which meant so much in winning the air war.

All Given Decorations—These skilled aviation men have all been decorated by the Army for their services, and their records include letters of commendation and special praise for their specific contributions to the war effort.

Col. Howard F. Rough, formerly Regional Manager at Large, returns after an active and effective military career with the Troop Carrier and Air Transport Commands. Following a year in which he assisted in setting up the Army's air-borne troop activities, he was made an air inspector with supervision of all inspection activities throughout the Pacific Wing.

Becomes Division Inspector—Later, as the ATC expanded into a division with three Wings, Rough served as Division Air Inspector, flying some 200,000 miles and visiting all Pacific ATC installations in the course of that work.

His last assignment with the ATC was to make a survey of the airports in the Tokyo area just prior to entry by United States Forces. Rough is serving as special consultant to Administrator T. P. Wright pending a definite assignment.

Col. Rough was born in St. Joseph, Missouri, and was graduated in aeronautics at the University of California and now lives in Arlington, Va.

Chief of Flight Operations—Col. Russell W. DeLany was connected with the Army Transport Command of the USAAF at Washington Headquarters. He was formerly Chief of the Air Carrier Inspection of the CAA in the Fifth Region, and rejoins CAA as Chief of Flight Operations Service. DeLany was born in Chicago, went to the University of Chicago and lives in Washington, D. C.

Col. John Marshall, who joins CAA as Co-ordinator of Safety Regulation, was assigned to the responsible position of Chief of Transport Aviation Service by the AAF. This was a most vital unit of supply to all theaters of operation. Before entering service, Col. Marshall was a Trial Examiner with CAB. Col. Marshall was born in Page, West Virginia, graduated from the law college of National University in Washington. He lives in Washington.

Well Known Veteran Returns—One of the best known of the returning veterans is Col. Bennett H. Griffin, who, with James Mattern flew nonstop from Newfoundland to Berlin in 1932, and later abandoned a round-the-world flight at Barasov, Russia. "Benny" Griffin, who was called to service from his position as director of the CAA's Standardization Center at Houston, was assigned to establish and operate a training station at Homestead, Florida, to produce pilots for the Army's tremendous air transport program.

Assisted by experienced pilots loaned to the Army by various airlines, Griffin took fresh graduates of Army primary training schools and made them into competent pilots of cargo planes that served military fronts all over the world. Many of these graduates

Veterans Back With Civil Aeronautics



Col. Howard F. Rough



Col. Russell W. DeLany



Col. John Marshall



Col. Bennett Griffin

took part in the sensational, high-altitude, air cargo operations on the China-Burma-India front.

Awaiting Assignment—The Homestead base was established by him with no directives from headquarters. Later, Griffin was made head of the Air Transport Command's world-wide Air Inspection Service. He is now in Washington awaiting assignment to CAA duties. He was born in Barton, Miss., and educated at Oklahoma University.

Four former Regional Managers of the CAA have returned, and each had gone back to similar jobs, now called Regional Administrators.

Col. George W. Vest now returns to his former position as head of the CAA's Third Region at Chicago.

In his work on Flying Safety for the Army, Vest applied the experience he has had in many years of civil aviation activity. He was born in Buckner, Missouri, educated at Drake University and lives now in Chicago.

Col. Joseph S. Marriott, who returns to his previous post as Administrator of the Sixth Region at Santa Monica, California, represented the Air Forces in the Interdepartmental Air Traffic Control Board in Washington.

This board cooperated with the Interceptor Command in the control of air space for traffic, and was concerned with facilities to resist enemy invasion by air and the establishment of airports and airways under war-time conditions. Col. Marriott was born in Modesto, California, educated at the University of California, and lives now in Santa Monica.

Lt. Col. Robert D. Bedinger, formerly manager of

the Seventh Region returns to that post as Administrator.

During the war he was a Commanding Officer and Tactical Inspector of Operations and Training at several Alaskan bases. Col. Bedinger was born in Walton, Kentucky, educated at the University of Georgia and lives now in Seattle.

Trained War Pilots—Lt. Col. Leonard W. Jurden returns to his original position as head of the CAA's Fifth Region at Kansas City. His war work consisted of the training of pilots at the Army Training Command at Fort Worth, Texas. Col. Jurden was born in Marshall, Missouri, went to school at Berkeley, California, and lives now in Seattle.

Col. Glynne M. Jones, for several years an operator of flying services, centered at New Orleans, and, for one short period in 1937, an Aeronautical Inspector for the CAA began his Army career by organizing the Anti-Sub Patrol in the Gulf of Mexico. He later went to England as Air Officer of the 8th Air Force, and then was Assistant Chief of Staff of the 9th and 12th Troop Carrier Command in all airborne operations in the Mediterranean and Europe Theaters. Col. Jones will join other CAA representatives in Germany to assist in reorganizing civilian flying.

Col. Jones was born in Belize, British Honduras and went to school in Covington, Louisiana.

British Test Their First Postwar Tailless Plane

The Manx, Great Britain's first postwar tailless aircraft, is now flying. Designed and built by Handley Page, the craft embodies the idea of the flying wing and has been constructed to prove this principle for the air transports of the future.

The Society of British Aircraft Constructors, Ltd., reports that the Manx weighs 4,000 lbs. and that this lower structure weight permits greater loads to be carried. It is powered by two de Havilland Gipsy Major engines of 140 hp. each, has a wing span of 40 ft. and a wing area of 246 sq. ft. The fuselage is 18 ft. long. Accommodating a pilot and one passenger, the Manx cruises at 150 mph. and has a ceiling of about 15,000 ft.

Apart from having no tail, which results in lowered air resistance thereby allowing much higher speeds, the Manx contrasts sharply with the conventional airplane. This type of plane offers great possibilities for the installation of jet propulsive units within its wings which are swept back at an acute angle. Rudders on the Manx are mounted at the tips and move in an outboard direction only. The ailerons also act as elevators and are known as "elevons."

Air Carrier Earnings Increase

The Civil Aeronautics Board announces net operating revenue for the first nine months of 1945 for the 19 domestic air carriers, including All American Aviation, Inc., Caribbean Atlantic Airlines and Hawaiian Airlines, reached a total of \$32,767,357, which is an increase of \$5,381,894, over the same period for last year. For the year ending Sept. 30, 1945, the net operating revenue for all domestic airlines was \$41,788,021 as compared with \$31,035,301 for the year ending Sept. 30, 1944. Express and freight revenues showed an increase from \$7,621,536 for the year ending September 1944 to \$11,048,654 for the year ending September 1945.

Engines for Postwar Light Aircraft

The de Havilland Engine company has announced its postwar range of piston engines for the lighter aircraft categories, four-cylinder and six-cylinder units of from 145 to 330 hp.



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